HISTORY AND HISTORIC ARCHAEOLOGY OF THE KANOPOLIS LAKE AREA

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by

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and

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Historical and historical archaeological investigations were conducted at Kanopolis Lake, Ellsworth County, Kansas by Environmental Systems Analysis, Kansas City, for the U.S. Army Corps of Engineers, Kansas City District. Kanopolis Lake is located on the Smoky Hill River in central Kansas. Research focused on the archival record of historic settlement in the Kanopolis area, the National Register evaluation of certain historic sites and the survey for new historical archaeological sites. Accomplishment of this work provides documentation evidencing compliance with Executive Order 11593 "Protection and Enhancement of

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the Cultural Environment: dated 13 May 1971, and Section 110 of the National Historic Preservation Act. This work was called for by the National Historic Preservation Act of 1966 (PL 89-665) as amended by Public Laws 86-523 as amended by Public Law 93-291.

Identification of potential archaeological sites from archival research, and the survey for these sites resulted in a total of 53 previously unrecorded archaeological sites being inventoried, substantially increasing the total site inventory for Ellsworth County. Of these, 51 were historical archaeological sites.

Evaluations of the historical archaeological sites inventoried indicates that 20 are not-significant, and 28 are potentially significant. The potentially significant sites will require additional historical or archaeological research.

The results of the work suggest that sedimentation since the construction of Lake Kanopolis affect recovery and investigation of archaeological resources. It is recommended that prior to additional archaeological work in the reservoir, a detailed geomorphological study of the reservoir be conducted. This study should focus specifically on problems associated with site locations.

ABSTRACT

Historical and historical archaeological investigations were conducted at Kanopolis Lake, Ellsworth County, Kansas by Environmental Systems Analysis, Kansas City, for the U.S. Army Corps of Engineers, Kansas City District. Kanopolis Lake is located on the Smoky Hill River in central Kansas. Research focused on the archival record of historic settlement in the Kanopolis area, the National Register evaluation of certain historic sites and the survey for new historical arahaeological sites. Accomplishment of this work provides documentation evidencing compliance with Executive Order 11593 "Protection and Enhancement of the Cultural Environment" dated 13 May 1971, and Section 110 of the National Historic Preservation Act. This work was called for by the National Historic Preservation Act of 1966 (PL 89-665) as amended by Public Laws 86-523 as amended by Public Law 93-291.

Historical research indicates that early Spanish, French and American explorers visited in or near the Kanopolis project area from 1541 until the 1850s. In the mid-Nineteeth Century the California Gold Rush along with the general movement westward of settlers, led to the establishment of frontier forts in Kansas to protect settlers, travelers and supply routes. The Smoky Hill Trail and the Fort Zarah Road were the two major travel routes through the area. Fort Ellsworth was established in 1864 on the banks of the Smoky Hill River to protect both routes from Indian harassment. Fort Ellsworth was replaced by Fort Harker two years later at the present site of Kanopolis. Many famous military men and scouts were connected with the two forts including George Armstrong Custer, Buffalo Bill Cody and Wild Bill Hickok.

It was also in the 1860s that the first settlers came to the area and began trade with the Indians. Stage lines came next, the best known being the Butterfield Overland Dispatch. The stage lines were followed by the Kansas Pacific Railroad which led to the founding of the city of Ellsworth in 1866. Fort Harker was abandoned in 1873.

As Texas cattle were driven north to railheads in the early 1870s for shipment east to the slaugherhouses, Ellsworth became an imortant cattle town rivaling Abilene, Wichita and Dodge City. By 1880, Ellsworth had died as a "cow town" and the surrounding area became pasture for resident cattle and farmland for corn and winter wheat. It was during the period 1880-1900 that huge ranches developed in the area. The Larson ranch, Millet ranch and the Sherman ranch were three of the more prominent ones. The Millet ranch encompassed 38,000 acres at the peak and was the largest ranch in Kansas at one time. The Sherman ranch was similar in size as it developed later into the Twentieth Century.

In 1886, the city of Kanopolis was founded and touted by promoters as a future "metropolis" and capital of Kansas. The bubble burst when the Kansas Legislature halted the move of the seat of government. Kanopolis then waned. Later, in the Twentieth Century, Kanopolis became important in the area for the mining of salt. Three salt companies flourished in the early 1900s and one plant operated into the 1980s.

Throughout the Twentieth Century, agriculture was the economic baseline of Ellsworth County. From 1900-1930 there was a continued trend away from corn and in favor of wheat, and away from cattle and toward a more integrated agricultural system. In addition, there was a decrease in the value of crops and livestock indicating the general farm depression of this period. Oil was discovered in Ellsworth County in 1930 and royalties help many farmers and ranchers save their land during the Great Depression. By the 1950s, agricultural prices had reached all time highs. Reasonable growth was experienced in agriculture between 1950 and 1980, and Ellsworth County had a reasonably equal balance between the value of crops and livestock.

The worst flood to ravage Ellsworth since the days of Fort Harker hit in 1938 when the Smoky Hill River left its banks. Kansas Congressional leaders successfully passed legislation in Washington which authorized the Kanopolis Dam and Reservoir on the Smoky Hill River. Construction began in 1940, became temporarily interrupted by World War II and the dam was finally completed and dedicated in 1948. By 1953, the area behind the dam contained a 3500 acre lake and attracted 1.25 million visitors a year. The project area today is typical of many agriculturally based areas in Kansas and the Great Plains.

The 11 sites evaluated for their National Register significance include the Black Ranch (14EW119), the Millett Ranch (14EW152), Fort Ellsworth (14EW16), the Smoky Hill bridge (14EW105), the Smoky Hill ford (14EW106), the Fort Zarah/Sante Fe road (14EW105/106), the Smoky Hill Trail/Denver Express Road (14EW153), rock shelters in Red Rock canyon allegedly used to house early homesteaders (14EW139), alleged stage stations and rock wall corral on Horsethief Creek (14EW154), the Farisville Post Office (14EW103), and the Faris Caves (14EW7).

Two of these sites, the Black Ranch and the Faris Caves, are felt to represent cultural resources eligible for listing on the National Register, based on standing architectural components. Three other sites, the Smoky Hill bridge, the Fort Zarah/Sante Fe road, and the Smoky Hill Trail/Denver Express Road, are closely related in age and function, and are felt to be cultural resources whose significance warrants nomination to the National Register based on their importance for early transportation and settlement of Kansas.

Identification of potential archaeological sites from archival research, and the survey for these sites resulted in a total of 53 previously unrecorded archaeological sites being inventoried, substantially increasing the total site inventory for Ellsworth County. Of these, 51 were historical archaeological sites.

Evaluations of the historical archaeological sites inventoried indicates that 20 are not-significant, and 28 are potentially significant. The potentially significant sites will require additional historical or archaeological research.

The results of the work suggest that sedimentation since the construction of Lake Kanopolis affect recovery and investigation archaeological resources. It is recommended that prior to additional archaeological work in the reservoir, a detailed geomorphological study of the reservoir be conducted. This study should focus specifically on problems associated with site locations.

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INTRODUCTION

This report details the results of historical and historical archaeological investigations at Kanopolis Lake, Ellsworth County, Kansas (Figure 1). This study was performed by Environmental Systems Analysis, Kansas City, for the Corps of Engineers, Kansas City District. This study is called for in the National Historic Preservation Act of 1966 (PL 89-665) as amended by Public Laws 94-422 and 96-515 and is authorized for funding under Public Law 86-523 as amended by Public Law 93-291. Accomplishment of this work provides documentation evidencing compliance with Executive Order 11593 "Protection and Enhancement of the Cultural Environment" dated 13 May 1971, and Section 110 of the National Historic Preservation Act.

Kanopolis Lake is located on the Smoky Hill River in central Kansas, and represents the oldest Army Corps of Engineers Lake in the state. Research at Kanopolis Lake focused on the historic period, or that period since the initial Euroamerican exploration and settlement of the area, and can be conceived as consisting of three essential components. The first component of this research focuses on the archival record of historic settlement in the Kanopolis area, and has resulted in the preparation of a local history of the Kanopolis project lands and vicinity. The second and third components of this research are archaeological, and involved the National Register evaluation of certain historic sites and the survey for new historical archaeological sites.

Archaeological evaluations were conducted at 11 historical archaeological sites situated on Kanopolis project lands. Seven of these were tested archaeologically, while the additional four were evaluated with a non-testing strategy. These 11 sites were among those identified by Merrill J. Mattes in a 1947 survey of the historical aspects of the Kanopolis Reservoir (Mattes 1947). Mattes' survey was by no means comprehensive, and considered only the most historically visible sites. The testing and non-testing evaluations conducted at these 11 sites were intended to result in recommendations on the eligibility of these sites for inclusion on the National Register of Historic Places.

The final component of the research involved the survey for new historical archaeological sites. This survey was not a comprehensive pedestrian survey of the project lands, but was rather a survey for potential archaeological sites whose locations were provided from a review of certain archival sources, primarily historical plats. The survey was focused on the field verification of these potential sites, and, if discovered, the recordation of basic site information. Based on site visits, recommendations were prepared on the further archaeological needs, if any, of these newly discovered sites. Of specific interest here is which of the discovered sites needs additional work in the form of archaeological testing.

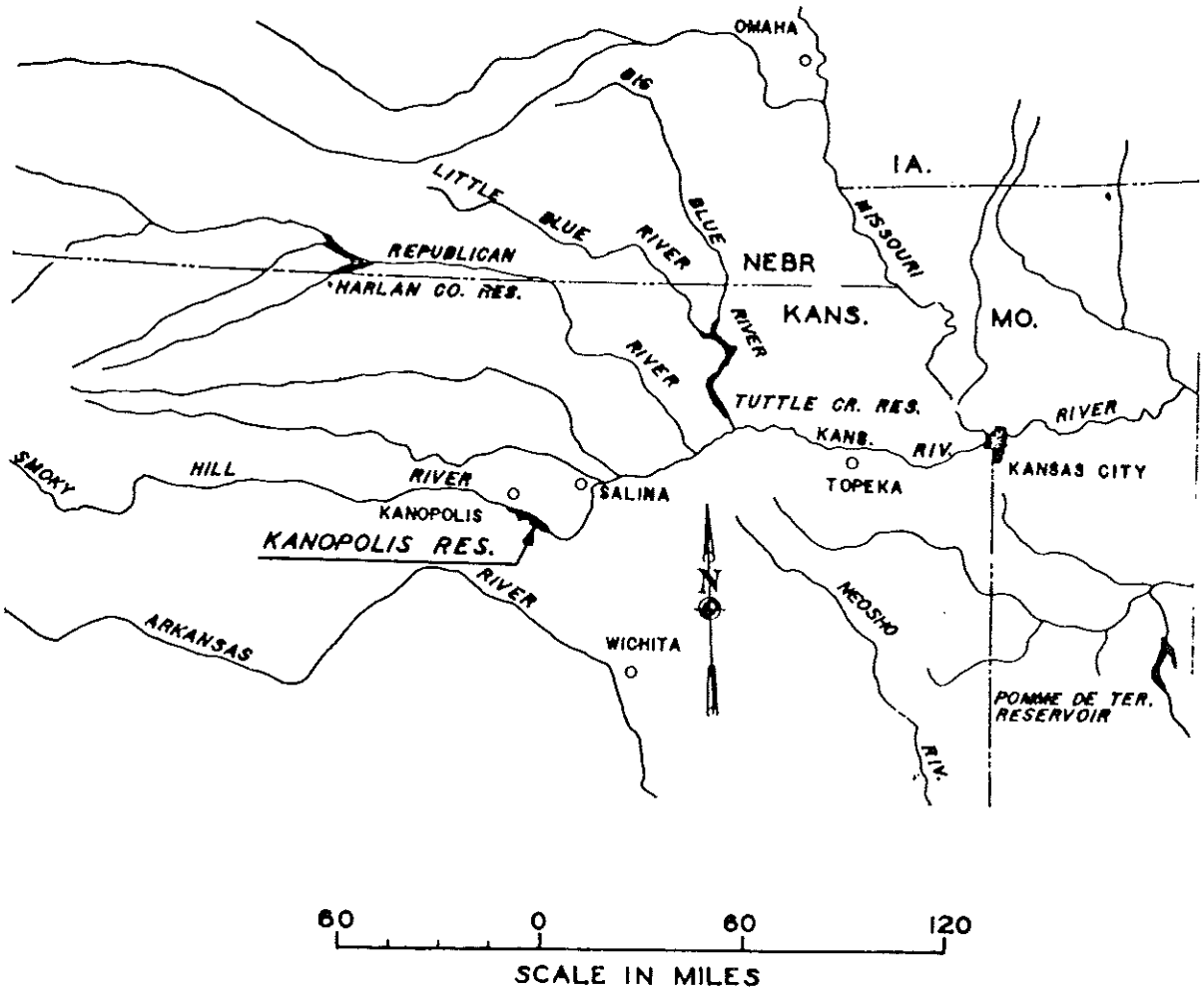

Figure 1. Location of Kanopolis Lake.

Project Background

Kanopolis Lake is the oldest Army Corps of Engineers lake in Kansas. Authorized by the Flood Control Act of 1938, construction of the Kanopolis Dam began in 1940, only to be halted in 1942 by the onset of World War II. Construction was finally resumed in 1946, and the dam was completed in 1948 (Corps of Engineers 1948).

Kanopolis Lake was one of a number of reservoirs planned and eventually constructed within the Missouri River Basin by the Corps of Engineers and the Bureau of Reclamation. Unlike Kanopolis, however, construction on most of these lakes was not begun until after the close of World War II, when an extensive reservoir building plan was implemented on the Great Plains (Lehmer 1971).

Archaeological research in the reservoirs planned for the Missouri Valley did not begin until after the close of World War II, with the first federal funds becoming available for this purpose in 1946 (Lehmer 1971). Had the construction of Kanopolis Lake followed its original schedule and been completed before the war's end, it is doubtful that any archaeological work within the reservoir would have been initiated prior to its filling. The delay caused by the war did allow, therefore, some archaeological work to be conducted.

Archaeological work at Kanopolis Lake prior to its completion focused on the prehistoric settlement. In 1947, Kivett and Shippee conducted preliminary survey work in the reservoir (Kivett and Shippee 1947). This survey focused on the survey of high probability site locations and the recordation of sites known by local residents. It was followed up in 1948 by Smith's excavations of a number of prehistoric sites discovered earlier by Kivett and Shippee (Smith 1949). This work was initiated as completion of the reservoir was imminent, a factor which severely limited the scope of research possible. Smith's excavations at 14EW6, for example, were never completed due to rising lake levels. No archaeological work on historic period sites was attempted at this time.

The historical resources of the Kanopolis reservoir were not ignored entirely during this early period. In 1947, Mattes prepared a report on the historical aspects of the area, based largely on literature review but also supplemented by field visits to selected sites (Mattes 1947). Mattes' work focused on the earliest and most historically important sites, and does not provide a comprehensive treatment. His work did, however, represent a typical phase of historic sites research during this period and which usually involved the preparation of an historical overview of a project, in which specific historical archaeological sites were identified as important, followed by archaeological excavations at some or all of the sites so identified as important. Kanopolis Lake was, however, completed before the second phase of this approach could be implemented, with the first funds for archaeological research at historic sites within the Missouri Basin reservoirs not being approved until 1950.

Following the completion of Smith's 1947 excavations of prehistoric sites at Kanopolis Lake, no archaeological work was conducted there until 1976, when the University of Kansas conducted at 15 percent sample survey of the reservoir (Leaf 1977). This project was intended to result in a predictive statement on the management needs of the reservoir, but did not focus on or systematically treat historical archaeological resources. A number of historical archaeological sites were nevertheless examined during this survey, notably the site of Fort Ellsworth (14EW26) and the Faris Caves (14EW7).

No archaeological work has been conducted at Kanopolis Lake since the completion of the 1976 University of Kansas survey. In the 45 years since the construction of Kanopolis Lake was begun, therefore, there has never been a comprehensive archaeological survey of government lands, a fact which the current project does not alter. This project does, however, represent the first systematic archaeological attention to the historical resources of the Kanopolis project.

ENVIRONMENTAL SETTING

Kanopolis Lake is situated along the Smoky Hill River within the southern portion of the Smoky Hills Physiographic Province, a subdivision of the Great Plains Physiographic Province (Steeples and Buchanan 1983; Department of the Army 1977). The Smoky Hills are one of the largest physiographic provinces in Kansas, and represent outcrops of rocks of Cretaceous age which form a topography of undulating hills and broad valleys. The Smoky Hills can be subdivided into three sub-provinces, each stretching from southwest to northeast and including, from east to west, outcrops of Dakota sandstone, Fencepost limestone, and Niobrara chalk. The Kanopolis Lake is located within the Dakota sandstone hills, although it is very near to the Fencepost limestone country (Wilson 1978:34-40).

Both the outcrops of Dakota sandstone and Fencepost limestone represented resources important to the historic inhabitants of the Kanopolis Lake area. Dakota sandstone was a preferred source of masonry building material, and was used extensively for dwellings and barns and somewhat less commonly for fences. After the introduction of barbed wire in the 1870s, fences utilizing this invention and posts cut from flat beds of limestone became common to the area, and still remain in active use in many places. The procedure for manufacture of these fenceposts is as follows:

> The soil was removed from the ledge and a line of holes was drilled into it about a foot back from the edge. Wedges were then fitted between "feathers" (rounded, tapered metal strips) into the holes and were gradually and uniformly tightened by tapping each with a sledge hammer and listening to its "ping". By carefully tapping the wedges, a slab of limestone could be split off and and sawed into the proper length for a fencepost. The chalky rock was relatively soft when first quarried and could be drilled and sawed by hand, but after being set in place the rock fenceposts "cured" and became much harder (Wilson 1978:38-39).

In addition to the common use of this Fencepost limestone for constructing fences, it was also occasionally used for the construction of buildings.

Another geologic resource that was exploited by the residents of central and north-central Kansas as early as the mid-1850s was coal. Deposits of lignite coal, a soft, brownish, low-grade coal, are found in northwestern Ellsworth County as well as in Russell, Lincoln, Mitchell, Cloud, Jewell, and Republic Counties. Lignite was mined using both strip and shaft mines, with production peaking in the 1890s and ceasing by 1940 (Steeples and Buchanan 1983:16-17). There is, however, no record of coal production on Kanopolis project lands during this period (Department of the Army 1977).

Salt also represents a local geologic resource that was historically important in the economy of the Kanopolis Lake area. Salt has been mined in the Lake Kanopolis region for most of the 20th century. One operating mine located just north of project lands near the community of Kanopolis has been producing salt from a shaft mine since 1915 (Department of the Army, 1977).

Another geologic resource of some economic importance in the Kanopolis area is clay, which is used for the manufacture of bricks. Brick clay is derived from extensive reserves in the Terra Cotta member of the Dakota formation (Department of the Army 1977).

Perhaps the greatest geologic resource of the project area are its soils, which have supported a strong agricultural (farming and ranching) economy since the mid-19th century. Soils in the Kanopolis area are derived from extensive loess deposits and consist of fine sandy loams which grade into silty and clayey soils. More specifically,

> Soils on project land belong primarily to the Chernozem, Alluvial, and Prairie great soil groups. They have developed in an environment having a mixed short and tall grass vegetation and have been constantly reworked through erosion and deposition by water and wind. These deposits average about 60 feet in depth and consist of fine silts and clays underlain by coarse sand and gravel. Surface soils are generally of medium texture and are slightly acid. Subsoils are permeable, with a moderate water holding capacity. If void of cover, surface soils are well adapted to severe sheet and gully erosion (Department of the Army 1977).

The Smoky Hill River has a well documented history of serious flooding. Severe floods are known to have occurred on the Smoky Hill in 1867, 1877, 1893, 1903, 1927, 1928, 1938, 1941, 1951, and 1957. The 1951 and 1957 floods occurred after the completion of Kanopolis Dam and may have had important effects on the sedimentation rates of the reservoir. This has potentially important implications for the archaeological resources of the project area, and is considered more fully within later sections of this report (Department of the Army 1977).

Kanopolis Lake is located in the mixed grass prairies of central Kansas (Kuchler 1964). This cover is dominated by a combination of species found in the Tall Grass and Short Grass prairies with the most important species being big bluestem (Andropogon furcatus), little bluestem (Andropogon scoparius), side oats gramma (Bouteloua curtipendula), blue gramma (Bouteloua gracilis), western wheatgrass (Agropyron smithii), buffalo grass (Buchloe dactyloides), and Indian grass (Sorghastrum nutans). The ground cover is not as dense as in the Tall Grass Prairie and is often broken.

Non-grass species are generally fewer in number and smaller in stature than are found further to the east. These reductions are caused by a decreased rainfall (20-30 inches annually) and an increase in mean annual water loss (90-95% annually). Non-grass species such as trees, shrubs, and woody vines are fairly well concentrated along the sheltered waterways, which provide both greater water for these species and shelter from harsh climatic conditions.

The biotic composition of the Kanopolis area, with mixed grass prairies on the uplands and with wooded conditions along the sheltered watercourses, was important for the development of the areas principal ranching economy. The sheltered woodlands along the watercourses provided sheltered settlement sites where both access to water and access to wood for fuel and building was at its greatest.

A large variety of species of non-grass vegetation are currently found in Ellsworth County, with most located along the watercourses. Major constitutents of the limited woodlands include the cottonwood (Populus deltoides), a variety of oaks (Quercus spp.), wild plum (Prunus americana), and box elder (Acer negundo). Less common are species such as eastern red cedar (Juniperus virginiana), black walnut (Juglans nigra), honey locust (Gleditsia triacanthus), redbud (Cercis canadensis), and Kentucky coffee tree (Gymnocladus didica) (Department of the Interior 1976).

Many non-grass species found in the project area today are not native to the area, and were introduced as ornamentals or for agricultural purposes during the historic period. The best example of an introduced species in the project area is Russian olive (Elaeagnus angustifolia), originally native to Eurasia. Other species that are native to Kansas but which have increased their ranges through historic use include the eatern red cedar, Osage orange (Maclura pomifera), Kentucky coffee tree, black locust (Robinia pseudoacacia), and box elder (Stephens 1969).

The Kanopolis project area also supports a diverse range of mammals, birds, amphibians, reptiles, and fishes. Mammals include deer (Odocoileus spp.), prong-horned antelope (Antilocapra americana), black-footed ferret (Mustela nigrides), coyote (Canis latrans), gray fox (Urocyon cinereoareenteus), red fox (Vulpes fulva), badger (Taxidea taxus), opossum (Didelphis marsupialis), and bobcat (Lynx rufus). Other mammals include the long tailed weasel (Mustela frenata), striped skunk (Mephitis mephitis), black-tailed jack rabbit (Lepus californicus), cottontail rabbit (Sylvilagis floridanus), plains pocket gopher (Geomys bursarius), thirteen-lined ground squirrel (Citellus franklinii), and the fox squirrel (Sciurus niger) (Department of the Interior 1976).

Birds in the Kanopolis area include both migratory and non-migratory species. Migratory species include the mourning dove (Zenaidura macroura), white pelican (Pelecanus erythrorhynchos), great blue heron (Ardea herodias), Canada goose (Branta canadensis), snow goose (Chen hyperborea), blue-winged teal (Anas carolinensis), pintail (Anas acuta), wood duck (Aix sponsa), mallard (Anas platyrhynchos), and sandhill crane (Grus canadensis). Seasonal species include the marsh

hawk (Circus cyaneus), bald eagle (Haliaeetus leucocephalus), killdeer (Charadurius vociferus), common nighthawk (Chordeiles minor), barn swallow (Hirundo rustica), house wren (Troglodytes aedon), and western meadowlark (Sturnella neglecta). Permanent residents include the ring-necked pheasant (Phasianus colchicus), bobwhite quail (Colinus virginianus), greater prairie chicken (Tympanuchus cupido pinnatus), great horned owl (Bubo virginianus), blue jay (Cyanocitta cristata), and common crow (Corvis brachyrhynchos) (Department of the Interior 1976).

Amphibians found in the Kanopolis project area include the tiger salamander (Ambystoma tigrinum), Great Plains toad (Bufo cognatus), Rocky Mountain toad (Bufo woodhouses woodhouses), garden toad (Bufo terrestris), bullfrog (Rana catesbiesana), and the Plains leopard frog (Rana pipiens). Reptiles include the northern snapping turtle (Chelydra serpentina serpentina), eastern ornate box turtle (Terrapene ornata ornata), lesser earless lizard (Holbrookia maculata), eastern fence lizard (Scelopurus undulatus), Great Plains skink (Eumeles obsolesus), prairie lined racerunner (Cnemidophorus sexlineatus viridis), western hognose snake (Heterodon nasicus), Great Plains rat snake (Elaphe guttata emoryi), and prairie rattler (Crotalus viridis viridis) (Department of the Interior 1976).

Fish common to the project area include the largemouth bass (Micropterus salmoides), channel catfish (Ictalurus punctatus), black bullhead (Ictalurus grunniens), green sunfish (Lepomis cyanellus), bigmouth buffalo (Ictiobus cyrpinellus), and longnose gar (Lepisostecus osseus) (Department of the Interior 1976).

The native environmental setting can be seen, therefore, to have offered a diverse range of resources to the people who settled and passed through the area during the historic period. The environment certainly had a vast effect on the form of this settlement, on the one hand serving to limit the range of cultural expressions that were possible; on the other hand offering a new range of contexts and raw materials through which familiar cultural expressions were adapted and established in this area.

RESEARCH DESIGN

The research conducted at Kanopolis Lake is best described as historical archaeological research. Historical archaeology represents a temporal subdivision of the larger area of archaeology which, in the United States at least, is housed within the discipline of anthropology (South 1977). Historical archaeology can be defined as a temporal subdivision of general archaeology because it deals with human culture subsequent to the end of prehistory. Chronologically, the domain of historical archaeology starts at different periods and with different intensities throughout the United States. Along the Atlantic coast, for example, intensive European settlement followed a relatively short period of exploration. On the Great Plains, on the other hand, a long period of incipient exploration and settlement by Europeans was characteristic, with intensive settlement occurring relatively recently.

Historical archaeology can best be defined temporally because it also does not differ substantively in method and goals from other areas of archaeology. To be sure, historical archaeology characteristically deals with radically different cultures than does prehistoric archaeology, but in many cases it also deals with the same culture as it transcends from prehistory to history (Wedel 1938, Strong 1940) or, increasingly, well after it has made this transition (cf. Lees 1985). Historical archaeology also generally deals with a much more diverse and rapidly changing material assemblage than does prehistory, with more sophisticated architectural remains, and with significantly broader systems of social and economic interrelationship related to a dynamic world economy fueled by the Industrial Revolution (Wallerstein 1974, 1980).

Historical archaeology is further endowed with a much broader range of data than is found in prehistory and which includes, as the name suggests to most, the written record of history. The historical record provides a magnificent supplement to the at times stark archaeological record of a people. For the more recent past, the oral historical record can be identified as another source not available to prehistorians. Perhaps most importantly, historical archaeology deals with the remains of known, living cultures, and the powers of analogy and assumption based on analogy are thus much greater and more direct for the historical than the prehistoric archaeologist.

These differences are qualitative; they are differences in data and not in approach or goals. If there exists a difference in approach between historical and prehistoric archaeology, it lies in historical archaeology's abilities to, in many cases, bypass or at least deal more efficiently with questions which are so fundamental in prehistory; questions such as, How old is a site? What was its function? What culture occupied it? Nevertheless, to many archaeologists, these questions of culture history have become ultimately less important than questions of cultural explanation. In this, historical and prehistoric archaeology do not differ, and the familiar axiom of "archaeology is anthropology or it is nothing" applies equally to historical and prehistoric archaeology (Willey and Phillips 1958). Furthermore, field

methodologies used in historical archaeology and prehistoric archaeology do not differ any more than the methodologies used within prehistory. Archaeologists working in prehistory and history alike have followed the quantitative revolution by adopting a problem solving approach based on careful, quantitative artifact analysis focused at the recognition and explanation of patterns (Binford 1964, South 1977).

This view of historical archaeology is, however, not one that is commonly understood within archaeology, specifically by the vast majority of archaeologists who have only been involved in studies of prehistory. Prehistorians seem at times more anxious to bestow historical archaeology to historians and architects than to keep it within anthropology - but this approach is as logical as retiring all the prehistorians and turning their studies over to geologists and paleontologists. The orientation of this research therefore perceives a unified record of the cultural past, divided heuristically into prehistoric and historic periods, and all of which can be profitably studied by anthropologists using archaeology as a methodology.

Research Goals

The Kanopolis Lake project involved a compliment of historical and archaeological research designed to satisfy a series of interrelated project management and research goals. These goals include the development of a detailed local history of the Kanopolis Lake area; the identification of potential archaeological resources not currently recorded but indicated as existing by the historical record; the preliminary field evaluation of these potential historical archaeological resources; and the evaluation by testing and in some cases detailed non-testing inspections of eleven recorded historical archaeological resources on project lands. Completion of these goals served to meet management needs; increased our scientific understanding of the Kanopolis Lake area during the historic period; contributed substantively to general historical archaeological research and literature; and will provide for the interpretation of the project area's history and historical archaeology to the general public. The following discussion outlines the specific approach to these goals.

The historical research for the project focused on the investigation of the holdings of a number of local sources and local and regional repositories for information pertinent to the Kanopolis project vicinity. This research was structured towards the development of a local culture-history of the Kanopolis project area covering the entire historic period to the present, and which specifically related the known archaeological resources to this culture-history. In addition, as an integral part of this research, potential archaeological resources will be identified.

In general, then, the historical component of the research addressed the following questions:

1) What was the culture-historical development of the project vicinity?

2) How do the known historical archaeological resources figure in this culture-historical development?

3) Do potential, unrecorded historical archaeological resources exist in the project area, and if so, how do they relate to the culture-historical development of this area?

The culture-historical approach to the Kanopolis project area focused on documenting the development and defining subsequent changes in the economy of the area and the relationship of economy to other cultural factors such as demography and settlement form and pattern. Following White (1949), this study views economy as the fundamental baseline of culture and the primary cause for changes in the majority of cultural forms observed in the past. An understanding of economic form and change is therefore primary to a general understanding of the culture-historical evolution of the Kanopolis area.

Equally important is a regional and at times a national and international perspective on the local culture-history of the Kanopolis project area. A significant portion of the history of the Kanopolis area is the history of frontier expansion - a phenomenon tied economically to the needs of expanding capitalistic, national and world economies (Turner 1893, Wallerstein 1974). While the focus of the study was on the local history of the Kanopolis area, it was recognized that this local history could not be properly understood without also understanding its relationship to the regional, national and international processes that so profoundly affected it.

Methodology

The Kanopolis Lake project has been concerned with National Register significance on two levels; one associated with 11 sites that were tested or otherwise evaluated during this project, and one associated with over 50 sites which were initially identified and surveyed as a result of this work. For the 11 sites tested or otherwise evaluated for their National Register significance, specific statements on the eligibility of these sites were to be developed. This required a combined consideration of archaeological, historical, and architectural information. In most cases, the historical information on a resource was sufficient both to allow a clear definition of the historical importance of a site and to lessen the need for archaeological data. In research on undocumented sites, archaeology must provide certain base-line data on site age, function, and cultural affiliation. At most sites evaluated at Kanopolis Lake, this data was already known from historical sources, and the primary need of archaeological testing became to define the integrity of preservation of a site.

Of the 11 evaluated sites, seven were to be evaluated through a program of archaeological testing and four with a non-testing approach. Procedures conducted at the seven tested sites included the delineation of site limits, the preparation of a detailed site plan showing the location and form of all cultural features, the recovery of diagnostic surface artifacts, the excavation of several one by one m test pits and,

as needed, shovel tests, and the preparation of a photographic record of the site and its testing. Methods utilized in defining site limits varied in accordance to site type and visibility. For surface scatters observed in cultivated fields, surface survey was utilized. For sites situated in conditions of dense ground cover, site boundaries were generally identified by a consideration of the limits of observed cultural features such as buildings and cultural boundaries such as fences and fields. On sites with dense ground cover, shovel tests and electronic metal detection were used as needed to help define site limits.

A non-testing program was to be used on four sites for which archaeological testing was felt to be inappropriate. These sites were related to early transportation, and substantial archaeological deposits were not expected. The approach at these sites was therefore to verify the presence of cultural remains attributable to these sites on the modern landscape, to prepare a detailed plan and photographic record of the resource, and to determine the status of preservation of the site from its current condition on the landscape.

Beyond the National Register evaluation of 11 sites, this project was intended to provide for the identification, survey for, and recordation of "potential historical archaeological sites". Potential sites were identified largely through the use of historical plats of Ellsworth County, although some locations were also suggested judgementally and were provided in Mattes (1947). Potential sites were plotted on USGS maps and an attempt was made to find their archaeological remains through standard site survey procedures - the difference being that only a fairly specific area was surveyed for each site. In those cases where archaeological remains were identified, they were recorded by filling out a Kansas State Historical Society site record form, with particular attention being paid to recording locational information and information on site size. Each newly discovered site was also photographed.

Based on the observed characteristics of each of these documented potential sites, some recommendations on their National Register significance was desired. Since only survey level data was available, there were necessarily restrictions on the specificity of the recommendations that could be made, but specific attention was made to identify sites which were clearly significant, clearly not-significant due to a deteriorate condition, and neither significant or not-significant based on survey data. Sites which could not be identified as either significant or not-significant are best described as potentially significant, and typically require some level of further research, possibly in the form of testing but also possibly including intensive historical research, before significance could be conclusively assessed.

There were a number of problems which this project has confronted and which an attempt has been to at least provisionally resolve. One of these concerns the type and level of testing needed at various historic sites. While the testing conducted is based on accepted practices developed largely from testing of prehistoric sites, it is questioned

whether this approach was the most effective in the specific project setting. Some recommendations on what may be a more effective approach to National Register evaluations have been presented.

Consideration of the significance of recorded potential sites - an unusually large number of historic sites - has suggested problems in considering site significance for historic sites. These problems are based on differences in the natures of the prehistoric and historical archaeological data bases, which lead to problems in the verbatim use of typically used approaches of site significance. This issue is discussed in some detail in the following report, and recommendations on an approach to historic site significance are made.

The detailed descriptive local history of the project area was written interweaving the role of the specified historic sites within the narrative. This was done where documentation was found in the archival search or elsewhere. This includes the development of a local culture history of the Kanopolis project area covering the entire historic period to the present.

Libraries consulted included: Kansas State Historical Society Library in Topeka (research library, newspaper and map room, photograph collection, microfilm collection and the State Historic Preservation office); Ellsworth County Historical Society Library and Museum, including the materials section; Fort Harker Museum; Farrell Library, Kansas State University, including the Kansas room; Spencer and Watson Libraries at the University of Kansas, including the Kansas collection and its extensive map collection; Salina Public Library; Kansas City, Kansas Public Library, including the Kansas room; and the University of Missouri at Kansas City Library.

In addition, land records at the Ellsworth County Register of Deeds in Ellsworth were reviewed and all property owners of all the parcels in every section of the project area were checked. This includes <u>all</u> property owners who ever owned the land back to the original land patents of the late nineteenth century. Also, local newspapers, census records, state agricultural documents, military documents and cemetery records were consulted. Oral interviews were conducted with local residents who had special knowledge about the area or who were familiar with local history. A number of secondary works were consulted as were some historic eyewitness accounts. Also, a number of books, newspaper and magazine articles, pamphlets, flyers and other materials were collected.

Special attention was paid to Ellsworth and Kanopolis cities because of their importance in dictating the fate of the entire project area and county. Emphasis was placed on economic conditions and events that led to historical changes in the area; agricultural conditions are thus detailed since they fashioned in large measure the economic status of the area. The Twentieth Century was included as an integral and important aspect of this study. Heretofore, there had been a paucity of information regarding the period after 1900.

From early exploration and settlement to the present, the information presented in the historical study attempts to bring the importance of the area into focus as the area relates to the state of Kansas and the nation.

National Register Evaluations

The focus of most cultural resources work conducted today, and including the work at Kanopolis Lake, is directed at determining if properties of National state or local significance are located on Federal land and, if so, how these properties can best be managed to ensure that they are protected as required by a wide range of Federal legislation. In accomplishing this, the National Register of Historic Places has become the primary planning tool utilized in determining what a significant cultural resource is and, as such, it is the basis for any management decisions affecting cultural resources.

The National Register was originally established as a provision of the 1935 Historic Sites Act, but at first only involved properties that were also listed as a National Landmark or that were located within a National Park. Under the 1966 act, the National Register became a primary planning tool concerning historic properties:

> The National Register is an authoritative guide to be used by Federal, State, and local governments, private groups, and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment (Federal Register Vol. 41, No. 28, February 10, 1966).

Since 1966, decisions on the preservation of archaeological resources have increasingly pivoted around issues of site significance based on National Register eligibility. Criteria for evaluation of the eligibility of properties for inclusion on the National Register were set forth in the 36CFR60.6. According to these regulations: to this

> The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of State and local importance that possess integrity of location, design, setting, materials, workmanship, feeling and association, and
>
> (A) that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> (B) that are associated with the lives of persons significant in our past; or
>
> (C) that embody the distinctive characteristics of a type, period, or method of construction, or

> that represent the work of a master, or that possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> (D) that have yielded, or may be likely to yield, information important in prehistory or history.

Of the four criteria of significance presented in the 1966 act, "D" is the most commonly applied to archaeological resources. This criteria, which simply states that sites must have yielded or may yield important information, has been subjected to a wide range of interpretations. These interpretations hinge on what is required for a site to be "likely to yield" important information.

In examining this question, Glassow (1977) outlines five characteristics that should be considered on a site-by-site basis as well as within a regional framework. These are variety, quantity, clarity, integrity, and environmental context. Variety and quantity refer to artifacts and represent significant factors in defining variation between sites. Sites with a large variety of artifact types differ from those with only a few types, and sites with a high frequency of a type differ from those on which that type is rare. Since this variation affects the meaning of these sites, and therefore, the information they contain, it is important to protect sites representing the full range of variation in artifact variety and quantity.

Clarity refers to the ease with which site data can be separated into discrete, meaningful units of analysis based on stratigraphy and other factors. Single component sites and clearly stratified sites possess more data than unstratified, multicomponent sites, and therefore have a higher value for general archaeological research. Integrity is a critical factor, and concerns the status of preservation of a site. Sites that have never been cultivated have a higher integrity than those that have, and therefore may have a higher value.

Environmental context refers to the setting of the site, and represents an important site variable. Sites located in different environmental contexts are generally assumed to have different cultural meanings. These differing envirionmental contexts should therefore be given careful consideration in identifying a representative sample of sites from an area.

Another significant factor in considering significance is site rarity or redundancy. A site, for example, may have poor integrity but if it is the only one of its type known, its rarity will probably override its integrity. If a site type is identified as a part of a representative sample of site types in an area, but if there are hundreds of similar sites, the issue of redundancy may come up. If examples of this site type are already on the National Register, or if documented examples have been excavated or are located outside of a project area and are in no imminent danger, specific sites located

within a project area may be determined to represent a redundant data source.

Although consideration of the significance of historical archaeological resources does not differ significantly from prehistoric resources, they can take advantage of criteria "A" and "B" and, to some extent, "C". Criteria A and B can only be applied to sites, such as most of those evaluated at Kanopolis Lake, for which there also exists written documentation. These criteria require the documentation that a site is associated with events or persons that have been significant in our past. This requires both the determination of the significance of the event or person in question, and a determination of a direct association between that event or person and a particular site.

Overall, it is important to remember that the National Register is a listing of physical properties with local, state, and/or national significance. Although the historical significance of a site may be obvious, for this resource to be listed on or be determined eligible for inclusion on the National Register of Historic Places there must also exist related physical remains reflecting and preserving this significance.

HISTORY OF THE KANOPOLIS LAKE PROJECT AREA

Early Exploration and Settlement

The historic period begins traditionally in Kansas in 1541 with the expedition of Francisco Vasquez de Coronado from Mexico in search of the famed Seven Cities of Cibola. He crossed the Smoky Hill River near Lindsborg not far from the Kanopolis Lake project area. A year later Father Juan de Padilla, a priest who had accompanied Coronado, returned to central Kansas to the Indian village called Quivira. Again, this expedition came close to the project area. In 1593 or 1594 another Spanish expedition came to Kansas from the southwest, however, all but one were killed by Indians. In 1601, Juan de Onate, governor of New Mexico, made another Spanish foray into Kansas, but did not make it as far north as the Smoky Hill River.

In 1723, the French sent Etienne Veniard de Bourgmont up the Missouri River to give them a better claim to the Trans-Mississippi West which was claimed by both Spain and France. The following year his expedition went as far west as Ellsworth County where in October he met with the Padouca, the name given by the French to the Plains Apache. He opened the area to French trapping and helped block Spanish influence. The first European to have possibly visited the Kanopolis project area might have been Pierre Vial, a Frenchman employed by Spain. In a trip from St. Louis to Santa Fe in 1793, he would have come close. Certainly many French, and later American trappers, must have traveled the Smoky Hill in the late 1700s and early 1800s (Long 1943).

While no Historic Indian group intensively occupied the Kanopolis Lake area, a number of tribes such as the Kansa, Plains Apache and Pawnee made use of it for hunting. The Kansa Tribe dominated east-central Kansas during the early Historic period. Their presence in Kansas was first recorded in 1673. They were chiefly located along the Kansas River east of the Kanopolis Lake area and to the southeast along the Neosho drainage (Wedel 1959). Based on the notes of Augusta Choteau and George Sibley, the Kanopolis Lake was included within the Kansa hunting grounds at ca. 1816-1818 (Unrau 1971). The Kanopolis Lake area is listed by Unrau as part of the lands ceded by the Kansa in 1825. Somewhat earlier, at about 1725, a Plains Apache or Padouca Village was located to the north of the Kanopolis Lake area. The Republican band of the Pawnee was located farther to the north on the Republican River near the Kansas-Nebraska state line.

In 1806, while Meriwether Lewis and William Clark were on their return trip from the northwest United States, Zebulon Pike, sent by the governor of the Louisiana Territory, visited central Kansas and crossed the Smoky Hill west of the project area. Historian George R. Root claims Pike was the first to use the term Smoky Hill. Pike also was the first to refer to the Central Plains as a desert, leading to the later designation of the region as the Great American Desert. The Stephan H. Long expedition of 1819-20 reinforced this perception of the region (Root 1935).

Other early explorers in the general area included William Becknell, "father of the Santa Fe Trail"; Josiah Gregg; Jedidiah Smith and Kit Carson. However, the first well documented exploration of the project area came in 1844 by John C. Fremont who was returning from his first expedition to California. He visited the area again in 1848 and 1853. On one of these trips, legend has it that he made a speech to his men and a few Indians at Fremont's Knob, east of Kanopolis. Fremont differed from Pike and Long in describing Kansas. While Pike and Long tended to be negative, Fremont was buoyant and saw great agricultural potential in the region (Fremont 1845). The United States Army Topographical Engineers took a few foraging missions up the Smoky Hill River in the 1850s. In 1851, a small group under Captain Pope followed the Fremont path through the project area. In 1853, a railroad survey party led by Captain Gunnison came close by the project area. In 1855, Lieutenant F. T. Bryan and Major L. Armestead led a survey party from Fort Riley through the project area. This party actually laid out the crossing on the Smoky Hill where the U. S. government bridge was later built over the river (Warren 1859).

While some other earlier migrations across the project area probably came during the 1849 Gold Rush to California, another national event was going to bring more people into Kansas. That event was the Kansas-Nebraska Act of 1854. A slavery compromise, the act resulted in settlers coming quickly into Kansas to secure its borders for the "free state" cause. Many pamphleteers and emigrant aid soceties wrote about the lush attractions of Kansas to encourage settlement from the Northeastern United States. Max Green, for one, described the Smoky Hill River valley and its attractiveness for settlers (Long 1943).

This wave of settlement led to increased activity by the federal government to establish outposts further west in order to protect settlers and buffer them against the Indians, particularly the Pawnee, Cheyenne, Arapaho, Kiowa, Apache and Comanche. The first major development in the area in terms of permanent settlement came in 1852 when Fort Riley was established at the confluence of the Smoky Hill and Republican Rivers. In 1855, as Major E. A. Ogden established the fort on a permanent basis, roads began to be surveyed as connectors to other forts to be built in the future. It was probably in that year that the bridge was built or completed over the Smoky Hill for the Fort Zarah military road which ultimately connected Fort Leavenworth and Fort Riley with Forts Mann, Atkinson, Larned, Zarah, Dodge, Aubrey as well as Fort Ellsworth (Harker). The bridge was destroyed by a flood in 1858. A ford was used as the Smoky Hill crossing after that date, about 200 yards downstream (Garfield 1932) (Figure 2).

The first group of known settlers to the project area came in 1859: P. M. Thompson and Joseph Lehman of New York, D. H. Page of New Hampshire, D. Cushman of Michigan, Adam Weadle a German and Leverato a Mexican. They were primarily buffalo hunters, who came to kill and transport the buffalo meat to a market in the Rocky Mountains and beyond. After they had pitched camp, a band of Indians stampeded their oxen and left them without the means to transport their meat. The incident so angered "Smoky Hill" Thompson, that he swore he would not leave the area until he was compensated for his loss. He moved to the

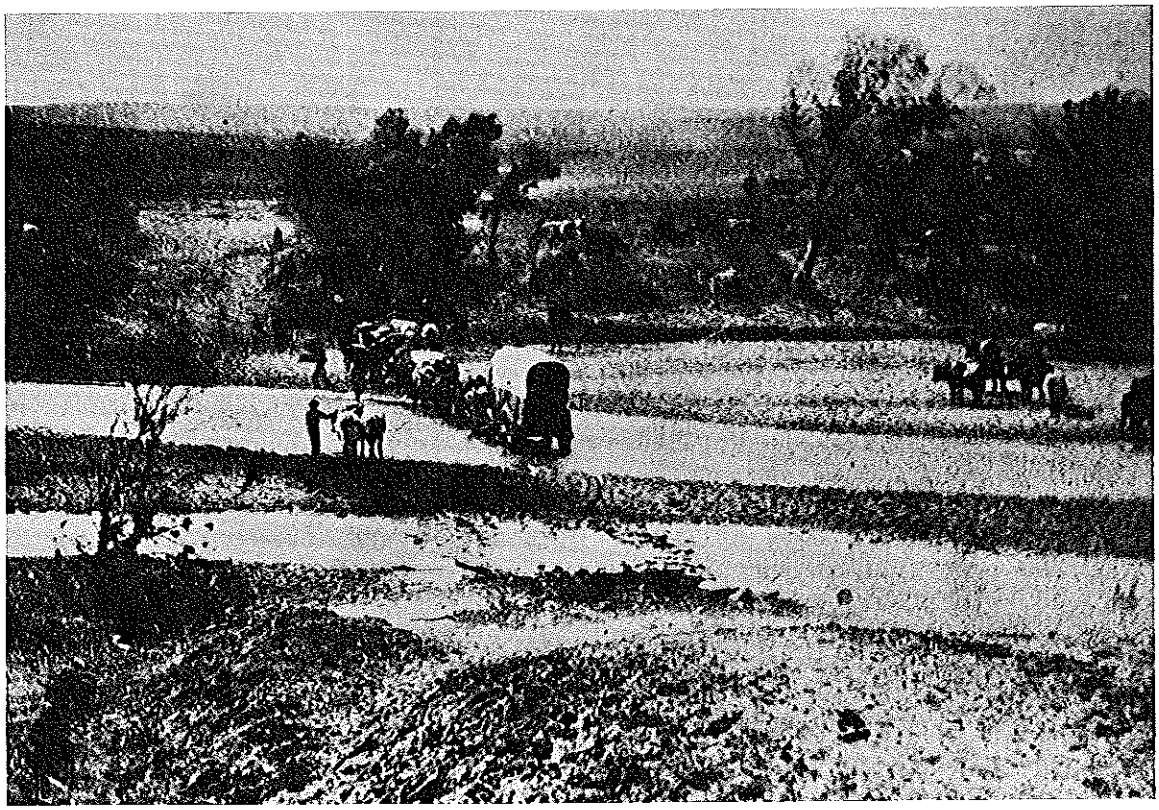

Figure 2. Bull train crossing the Smoky Hill near Ellsworth in the 1860's. (Gardner photo #145, Courtesy, Kansas State Historical Society.)

bank of the creek which still bears his name and planted corn. Lehman and Page settled at the Smoky Hill River crossing on the military road. There they built a log house and some other outbuildings (Lyon 1879).

The following year S. D. Waler of Wisconsin, J. J. and C. L. Prather of Kentucky and Irvin and Henry Faris of Ohio settled on Clear Creek where the military road crossed. They built a log house and a smoke house for buffalo meat. That same year H. Wait brought the first cows to Ellsworth County. He became a partner of Thompson (Choitz N. D.).

During the Pike's Peak gold excitement of 1859, another road was marked out across the project area, over which eventually there was enormous travel. In 1859, 1860 and 1865, the government actually plotted it and extended it each time. Lieutenant Julian R. Fitch, who participated in the 1860 and 1865 surveys, left quite a descriptive account of the project area. This road led to what became known as the Smoky Hill Trail, or the Denver Express Road. It was also used by the Butterfield Overland Dispatch Stage Line until the Kansas Pacific Railroad absorbed it. This trail also connected Forts Harker, Hays and Wallace until 1873 (Junction City Union 9-9-1865).

In the spring of 1861, the early settlers of the project area planted corn. They had a relatively good harvest that summer. These men had no women with them. The first woman settler in the County of Ellsworth was the wife of Thomas D. Bennett, a blacksmith who also became a partner of Thompson. These early settlers endured prairie fires, windstorms and severe winters. But the area also provided abundant wild game: buffalo, antelope, elk, black-tailed deer, rabbits, wild turkeys, quail and grouse. The animal most hunted was the buffalo. The hides could be sold for five cents a pound in Leavenworth. The first known child born in the County was the son of James Lewis. Many of these early settlers stayed only a short time and left (Lyon 1879).

The Kansas Stage Company, running a weekly stage from Junction City to Fort Larned, established a station at the Lehman and Page ranch located on the Smoky Hill River crossing (the later location of Fort Ellsworth). This ranch consisted of about six buildings. Two neighboring ranches were established on the river by the Faris brothers and also by Page and Lehman as a trading post with the Indians. Helpers were hired to staff these few ranches (Biennial Report 17).

These early frontier settlers were plagued by Indian harassment, most notably Cheyenne and Arapaho, and at least one encounter with bushwackers. In early 1862, small Indian parties attacked hunting parties and the first white settler was killed. Several ranchers from outlying areas toward Salina convened at the Page and Lehman ranch on the Smoky Hill River where a standoff was reached and the Indians left (Biennial Report 17). That fall, about twenty "Jayhawkers" made raids in the area. These men were pro-slavery vandals who came to the newly created state to hopefully turn it back into a slave state. Kansas was admitted to the Union in 1861. This band of "Jayhawkers" raided Salina unexpectedly and proceeded to terrorize that small community. Every house and store was inventoried and ammunition, guns, livestock and

foodstuffs were confiscated as they then headed west. What they didn't steal, they destroyed. They did not, however, do bodily injury to anyone. A day or two later they raided the Thompson ranch as Page and Lehman were coincidentally there. Thompson gave them a horse, four mules and a shotgun. The Faris ranch was sacked, but nothing taken. An eastbound stagecoach of the Kansas Stage Company encountered them. They took the mules and made the driver and his one passenger walk to the Smoky Hill station (Choitz N.D.).

In May, 1863, an Indian uprising, most likely Cheyenne or Arapaho, would bring a temporary end to early settlement in our area of study and in Ellsworth County. The Indians began attacking settlements again and killed D. L. Walker. The settlers met again at the Page and Lehman ranch for mutual protection, but after a few days they decided to abandon Ellsworth County and fled to Salina (Choitz N.D.).

Military Occupation

In August, 1864, Fort Ellsworth was established as one of a chain of forts in Kansas to protect outlying settlements from such Indian attacks and keep travel and communication lines open. Company H of the Seventh Iowa Volunteer Cavalry was ordered to the present day area of Ellsworth County to build a fort. Lieutenant Allen Ellsworth and his men built a wooden blockhouse at the site of the Page and Lehman ranch on the north bank of the Smoky Hill. He was also ordered to build a wooden bridge over the river by his commanding officer, General Curtis. Other buildings would follow. Part of Ellsworth's job was to also protect the construction crews of the Kansas Pacific Railroad. General Curtis named the new fort for the lieutenant. In 1866, a new site was selected for the fort one mile northeast on higher ground away from the river because of the threats of high water and flooding. The name was then changed to Fort Harker in honor of Brigadier General Charles Harker. However, the name Ellsworth was later used as the name for the city and the county (Choitz N.D.).

Fort Harker was the main distributing point for all the military posts further west and one of the most important military stations west of the Missouri River (Figure 3). Colonel Henry Inman headed the quartermaster's department at the fort from 1867 to 1869. Many famous military men, such as Generals Hancock, Grant, Harvey, Forsyth, Sherman, Sheridan, Custer, Sully and Miles (of the Fifth U.S. Infantry who was in command of the fort from 1868-1870) were connected with the fort as well as scouts Buffalo Bill Cody and Wild Bill Hickok. During the Indian raids of 1868 and 1869, General Hancock assembled an army of several thousand men at Fort Harker, prior to the campaigns against the Indians farther west. The Indians eluded him and his mission proved unsuccessful. Fort Harker was used as the base of all expeditiions agains the Indians in the wars of 1868-1869. The Cheyenne, Comanche and the Arapaho were the chief adversaries of the Army. It was from Fort Harker that General Forsyth started with a group of fifty civilian scouts to track the marauding Indians. They encountered the Indians on the Arickaree fork of the Republican River, and entrenched themselves on

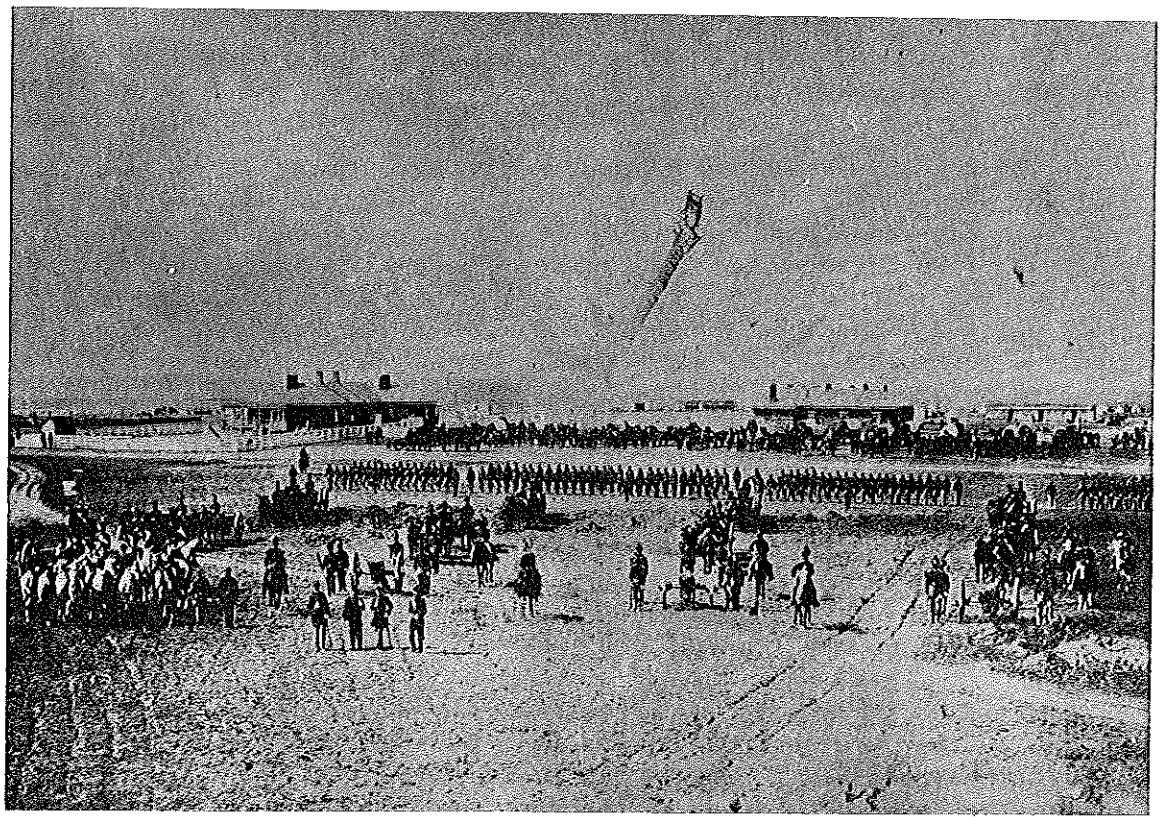

Figure 3. Fort Harker parade ground in 1867 (Gardner photograph, Courtesy, Kansas State Historical Society).

Beecher's Island and held out for eight days against thousands of Indians.

Fort Harker in 1870 constituted several buildings set up around a parade ground that measured 150 by 120 yards. The buildings consisted of four one-company barracks, eight frame buildings for married soldiers and support people, nine officer's quarters, three store houses, an ice house, a guardhouse, a hospital, bakery, four stables and a combination building used as a chapel, postoffice and library (Jelinek 1973). Fort Harker under normal conditions numbered about 700 men with about 1400 civilian employees in the quartermaster's department. The fort was occupied by regular troops until October, 1872, when Lieutenant Edward Randall left the garrison with the Fifth U. S. Infantry via special orders. The post was temporarily reoccupied during the winter of 1872-1873 by detachments of the 6th U. S. Cavalry, but these troops left the post in early April, 1873 (Sheaf 1938). Fort Harker became the most important military post between Missouri and the mountains. It became a distributing depot for all army supplies required by the government in the western country and for the military posts along the Arkansas River and in the territories of Colorado and New Mexico. The extension of the Kansas Pacific Railroad put an end to the usefulness of Fort Harker. In 1873 the reservation on which it stood was thrown open to settlement. The officer's quarters and guard house still stand to mark the site of the once famous post of Fort Harker. The Ellsworth County Historical Society has restored the Guard House and made it into a museum, featuring the military, the old West and the history of Kanopolis (Circular No. 4 1870).

Stage Lines

Early stage lines crossed the Kanopolis project area. The Kansas Stage Company was mentioned earlier. With the establishment of Fort Harker, D. A. Butterfield decided to use the Smoky Hill Valley as a stage route from Atchison to Denver. Before any military posts were established beyond Fort Riley, he had sent expeditions to measure distances, to check the availability of wood and water and to determine the line the road should travel. In September of 1860, one expedition reported to Butterfield that the distance from Atchison to Denver was 606 miles. Another expedition in 1865 headed by Lieutenant Julian Fitch left a detailed account of the proposed route and the Ellsworth County leg of it (Junction City Union 9-9-1865).

Fort Ellsworth was a home or eating station along the Butterfield Overland Dispatch Stage Line. The Fort at that time was the only permanent settlement between Salina and Denver. According to Henry Faris the post consisted of two commissary buildings and a sod house with the barracks and officers quarters consisting of dugouts along the river bank. Stations along the route were marked out about fifteen miles apart (Sheaf 1938). Red Concord coaches pulled by four horses with room for nine passengers supported the route. Each passenger was given a Ballard rifle, two navy revolvers, two blankets, a knife, tobacco and pipe. Drivers were changed about every forty-five miles, horses every fifteen. The Butterfield Stage began triweekly passenger

service in 1865. The trip from Atchison to Fort Riley was made in twenty-two hours. The trip to Denver took five to six days barring problems. Butterfield owned twenty coaches and twelve hundred oxen, mules and horses.

The Butterfield Stage lasted only about eighteen months. It failed for three reasons (Harper's 1867). First, after the stages left Fort Ellsworth, they were traveling virtually under their own protection. This left them subject to Indian attacks. The Indians burned several stations and ran the stock away. The government did not offer the protection that the military road along the Platte River in Nebraska enjoyed. Consequently, the loss by Indian destruction became too great for the financial backers to bear. Second, the bursting of the mining bubble in Colorado contributed to the loss of passengers and thus revenue. Third, the completion of the Kansas Pacific Railroad which made the trip faster and more pleasant. One other stage line was established in Ellsworth County before the coming of the railroad. In 1866, the Kansas City and Santa Fe Stage and Mail Line moved stock and coaches from the old Santa Fe trail and connected with the railroad which had been completed to Junction City. According to one source, a J. M. Coombs established a station at some point between Clear and Plum Creeks on a spot five miles east of the Smoky Hill River near a large spring and a small creek. It was made of wood (Choitz N.D.). These early stage lines brought many settlers to and through the project area and played a mojor role in settlement.

Early Community Settlement of Ellsworth

In 1866, Fort Harker was established replacing Fort Ellsworth. After the Forts were established, settlers started coming back to the area, most notably the Faris families. Also, military personnel stationed at the Fort would stay after their military service to help settle the area, like George Sternberg and Henry Inman. Soon, permanent towns would begin and a new area would be born. As the Kansas Pacific Railroad extended tracks west and into the area of the fort, rumors spread around the countryside suggested that the tracks might end there, thus making the area a gateway to points further west. It would be the "end of the track" or the "dropping off point". So, also in 1866, John H. Edwards and a number of wealthy men conceived the idea of founding a town west of Salina named Ellsworth after the fort (Figures 4 and 5). It was planted on the banks of the Smoky Hill river at the west edge of the Fort Harker military reservation. Thus, the fort would give protection to the farmers and settlers who would come there. V. B. Osborne was another member of this group of men and became Ellsworth's first police judge and prominent in the early history of both the town and county of Ellsworth (Ellsworth Co. Cen. 1967).

According to now deceased Ellsworth historian George Jelinek, news spread so fast about the new town site "that in three weeks the population was 1000" (Jelinik 1967). But the first site of Ellsworth was short lived. On June 9, 1867, the Smoky Hill flooded and destroyed the town. Kansas historian A. T. Andreas, describes the devastation: "In a short time the flourishing town of Ellsworth was standing in about

Figure 4. View of Ellsworth in 1867 (Alexander Gardner photograph. Courtesy, Kansas State Historical Society).

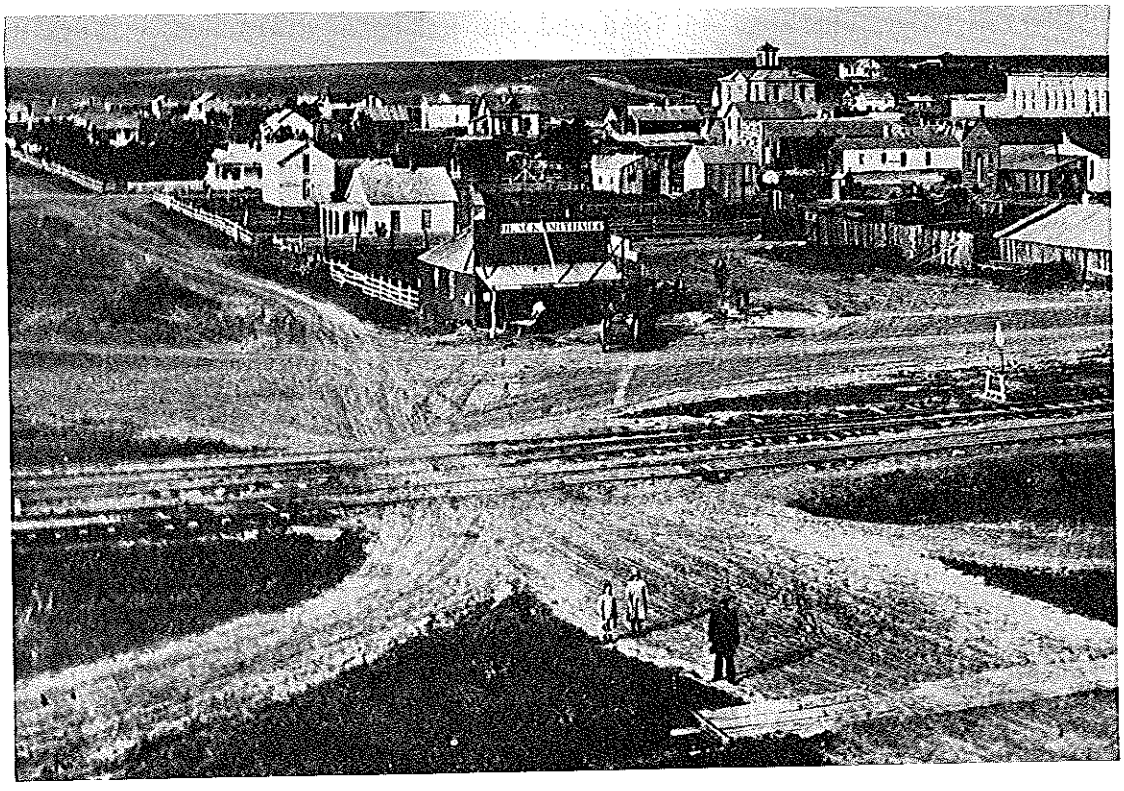

Figure 5. Birds-eye view of Ellsworth in the 1870's (Courtesy, Kansas State Historical Society).

four feet of water. Many of the buildings were washed from the foundation, and all types of business were brought to a stop." In addition to the flood, shortly afterward, Indians attacked the town and a wave of cholera set in. Again quoting Andreas, "About the first of July, 1867, the cholera broke out simultaneously in Ellsworth and Fort Harker and made terrible ravages of both places. During the two or three weeks the scourge raged, it carried off about 300 people at the Fort and about 50 of the citizens of Ellsworth. Out of a population of nearly 1000, only about forty remained, all the rest having fled." It was after these traumas of 1867 that the remaining settlers of Ellsworth moved the town to a new location and higher ground. On July 18, 1867, the first plat of the new location was placed on record by the Town Company (Andreas 1883).

Because of the rural nature of Ellsworth County, then as now, the history of Ellsworth parallels that of the county with some exceptions. While none of Ellsworth lies in the Kanopolis Lake Project area, its effects on the project area are many and predominant.

Along with the Ellsworth settlers came many rural homesteaders. Typical was the Reverend Levi Sternberg who came in July, 1866 from New York. A Lutheran minister, Sternberg came to Ellsworth County enticed by his son George who was stationed at Fort Harker and also bought land along the Smoky Hill River. Other sons eventually came and the result was a large farm called the "Smoky Hill Dairy" adjoining both sides of the river supplying farm products to the fort (Dykstra 1961).

Other rural entrepeneurs of this period included Daniel B. Long from Ohio, who came in 1866 and who had been stationed at Fort Harker. By 1869 his "Springdale Cheese Factory" was producing 500 pounds of cheese per week and by 1874 he had acquired 800 acres and 240 head of cattle. Also, there was Jacob Howard who arrived from Michigan in 1868. By 1873, he had a cattle and dairy herd of 500. And finally, the brothers by the name of Powers laid out a ranch in 1869 which grew to 2500 acres by 1875, about one fourth of which was under cultivation. They later established the first permanent bank in Ellsworth. Sternberg, Long and the Powers all owned land in the Kanopolis project area (Dykstra 1961, Ellsworth Co. Reg. of Deeds).

Some of the more colorful and famous characters of early Ellsworth, with whom any reader would be familiar are Wyatt Earp, Buffalo Bill Cody and Wild Bill Hickok. Earp is said to have come to Ellsworth from Caldwell with money in his pocket from the sale of cattle to buy other cattle in Ellsworth. It is claimed he accepted the badge of Ellsworth City Marshall for a confrontation with a local thug named Ben Thompson and his henchmen. This story is disputed, and if true, it was a brief tenure - one day, as we shall see later.

William F. Cody, also known as Buffalo Bill, and James Butler Hickok, Wild Bill, were both scouts for military units at Fort Harker and Ellsworth at various times during the summer of 1867. Cody left for Fort Wallace and Fort Hays and attempted with several others to found the City of Rome near Hays. Years later, Cody invited many of his old Ellsworth friends to his world famous Wild West Show as his guests,

whenever it was near Ellsworth. Arthur Larkin was a long-time friend of Cody and owned land in the Kanopolis project area (Ellsworth Co. Cen. 1967). Hickok moved to Ellsworth after it was officially organized. He ran for Sheriff of Ellsworth County, but was defeated by Lieutenant E. W. Kingsbury. Hickok later became a deputy U. S. Marshall and a City Marshall in Ellsworth and Hays. In 1870, he was involved in a gunfight with some soldiers stationed at Fort Hays. He killed several of them and was wounded. General Phil Sheridan was reported furious and ordered Hickok arrested "dead or alive". Hickok fled to Ellsworth from Hays and went into hiding at the home of attorney Harry Pestana until he recovered and could leave town. He also served as Marshall at Abilene (Wilson 1979).

Hickok, who became a legend and a hero to those who adore the Old West was never held in high esteem by most Ellsworth citizens. Much of his time in Ellsworth he lived with an Indian woman named "Annie" and her son in a hovel south of the city jail of that period. The boy, who some people claimed was Hickok's died of diptheria at the age of fourteen and was buried in a "potters field". Hickok deserted her and when later she learned that he had been killed while playing cards in Deadwood, South Dakota in 1876, she was to have said, "I'm damned glad of it." Annie worked as a scrub woman in an Ellsworth hotel. She later married a man named Wilson who also deserted her and with whom she had a daughter. Annie died in the county poor farm in 1885 (Wilson 1979).

More traditional and permanent settlers to come to Ellsworth during this early period and who became leaders in Ellsworth's economic and political life were Perry Hodgden, Ira Phelps and Arthur Larkin. Hodgden, from Ohio, opened a dry goods store and held about $4000 worth of land in 1870 in the county. Phelps, from New York, opened a grocery store and by 1874 boasted sales of $100,000 a year. Larkin, who was born in Ireland, came to Ellsworth in 1867. He owned a restaurant in Leavenworth where he served in the army. He established the first hotel in Ellsworth and a general store. In 1870, he, like Hodgden, had almost $4000 in land, some of which was in the Kanopolis project area. Larkin's various enterprises probably made him the wealthiest member of the city and county through the 1870s (Dykstra 1961).

Another early settler who owned land in the project area was William Kindt. A German immigrant, Kindt first settled just below what is now Kanopolis Dam in 1868. His brother, Amos, lived on the Smoky Hill near the junction with Thompson Creek. Amos Kindt worked for the Union Pacific Railroad for a period of time before he hired on with a family named Hughes who owned a farm. He later started his own farm. Kindt left a rather lengthy description of early life in Ellsworth County and the strained relations between early cattle ranchers and farmers. With open range still accepted practice in this part of the country, farmers had problems with herds of roaming cattle eating and trampling their crops. Kindt left no doubt about his contempt for the Powers brothers who were early cattlemen. In 1870, Kindt worked for a farmer named Tom Norman who was so enraged by the damage done by the Powers' cattle in his corn field, that he rode over to the Powers ranch, pulled his gun and threatened to kill two of the brothers as well as some hired hands if they did not pay for the ruined crop. They paid.

However, they sent the sheriff to arrest Norman who was fined twenty-five dollars and had to chop wood for the sheriff for two days (Wilson 1979).

In 1868, the Kansas Pacific decided to continue the building of the railroad west. In a long-shot attempt to save the value of their city at the end of the track, Ellsworth promoters obtained a charter for the "Ellsworth and Pacific Railroad Company". They then petitioned Congress to abandon support of the extension of the Kansas Pacific in exchange for a route from Ellsworth to Santa Fe. The move failed and with it went Ellsworth boosters' hopes of a railroad center. To make matters worse, the crops around Ellsworth that year were bad and with more Indian raids, settlers were forced to seek food and shelter at Fort Harker. Ellsworth began to lose population. As the railroad pushed westward in 1868, the unsavory elements of construction workers and various camp followers moved with it. As the town calmed down, those who stayed began to see the city's future in terms of the Texas cattle trade (Dykstra 1961).

The early years of the Twentieth Century saw the beginning of rapid communication and transportaion in Ellsworth County. In 1902, Ellsworth had a telephone office which extended lines to Lorraine, Holyrood and Bushton by April of 1905. Rural mail routes sprang up during this period. The first automobile arrived in the county in 1903, when George Tremble's Autocar made in Pennsylvania came to town. It was gas powered and made quite a splash in the town and county of Ellsworth. In 1904, the state legislature established the first good road system (Ellsworth Reporter 7-3-75).

The only United States President to ever visit Ellsworth was Theodore Roosevelt. He came in May, 1903 and gave a speech to 5000 people from the back of a train during a whistle stop tour through Kansas. It made quite an impression in the county and people talked about it for years (Ellsworth Reporter 7-3-75).

Just about everyone familiar with Kansas and its history knows the horrible story of the murders of the Clutter family in Holcomb, Kansas, in the 1950s, documented in Truman Capote's book, In Cold Blood. Probably the county's most terrible incident took place on October 19, 1911. On that date Will Showman, his wife and their three small children were found in their home in the western part of town murdered in brutal fashion. Their heads were all beaten in with an axe. Charles Marzyck, a brother-in-law of Mrs. Showman, was suspected of the murders but no evidence could connect him to the vicious crime. It was never solved (Ellsworth Reporter 7-3-75).

Ellsworth and the Cattle Trade

As early as 1867, a plan was discussed to establish a trail through Indian Territory (Oklahoma) from Texas toward the area of Ellsworth over which Texas cattle could be driven for shipment by railroad east for markets meeting the growing post Civil War hunger for beef (Figure 6). In March, 1869, the Kansas Legislature established a cattle road to Fort

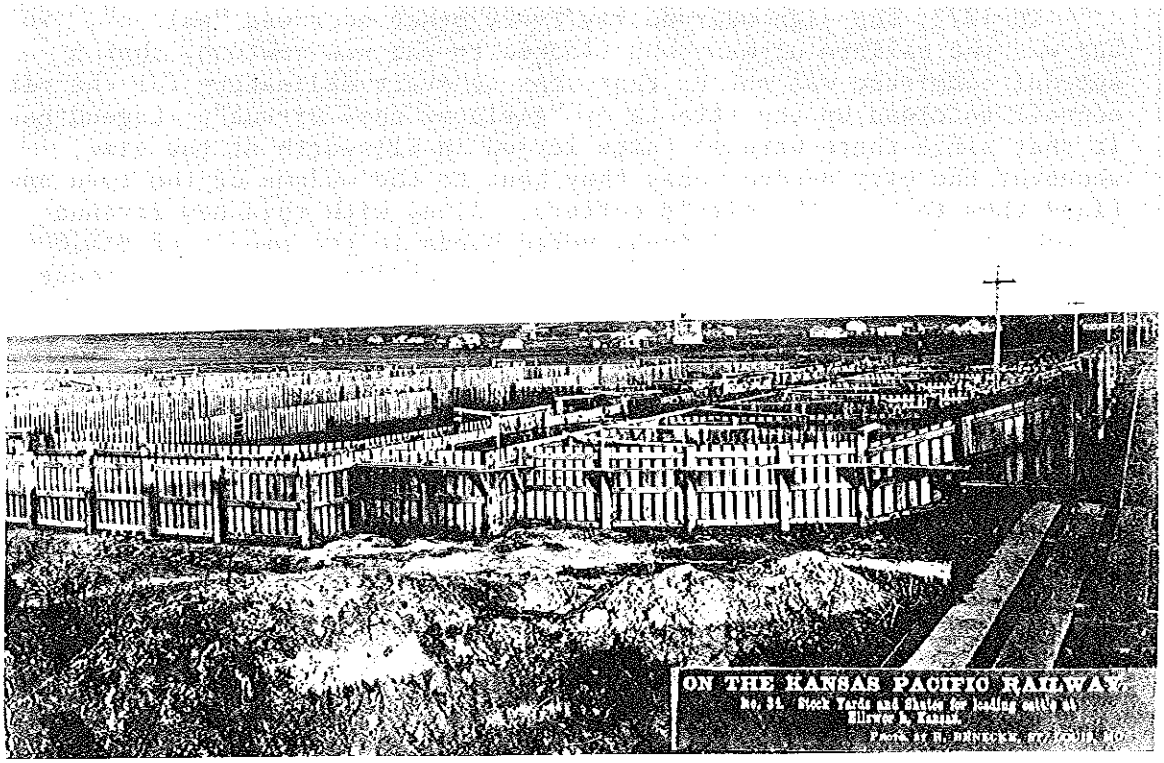

Figure 6. Stockyards and chutes for loading cattle at Ellsworth 1870's (R. Benecke photograph, Courtesy, Kansas State Historical Society).

Cobb in Indian Territory. Cattle driving was slow at first, partly due to Indian raids and fear of them. Not until 1871 did Ellsworth receive large numbers of Texas cattle. That year 35,000 head were shipped on the Kansas Pacific. Things were wide open and so were the saloons, brothels and gambling houses. Very few fences bothered the roving herds of cattle. After 1871, Abilene ceased to be an important cattle market. In February, 1872, a circular notifying drovers not to return to Abilene was prepared by enemies of the cattle drivers and sent to Texas. Saline and Dickinson counties had legally stopped the cattle trade. A considerable portion of the cattlemen drove their herds to Ellsworth beginning that year and some of the businessmen and others not so desirable deserted Abilene and followed. It was this period, 1872-1875, that Ellsworth became famous as a wild and woolly cowtown (Dykstra 1961).

In 1872, the sign over nearly every other door was "saloon". So bad was the calibre of many who flocked to the new cowtown, that a special committee was set up that year to draft ordinances for the city council to clean up the streets of "girls of easy virtue". Legend has it that since there were no taxes levied in Ellsworth at the time, whenever the city needed money they went to the madams of the town and fined them to fill the city's coffers. Along with this new revenue source, in April, 1872, citizens voted bonds in the amount of $12,000 for a two-story permanent courthouse and an adjacent stone jailhouse was built behind it. Although Ellsworth had a courthouse and some semblance of law, 1872 and 1873 saw the cattle trail officially transferred to Ellsworth, bringing with it some 2000 ruffians, cattlemen, cowboys, gamblers, prostitutes and railroad section hands who kept excitement in the town at fever pitch. It was this atmosphere of lawlessness which eventually led to the infamous shooting of Sheriff C. B. Whitney (Jelinek 1967).

Ben and Billy Thompson, gamblers and gunmen from Abilene, had been enraged over a conflict arising out of a poker game at a local saloon and left to get their guns. They returned to the saloon armed with a rifle and shotgun. Whitney, unarmed, hurried to the saloon and after some discussion, persuaded them to join him for a drink. Whitney left the saloon and a few moments later, Billy Thompson followed him and fired point blank at Whitney, hitting him in the arm and chest. Whitney died three days later. Local legend says that Wyatt Earp was in Ellsworth the day of the shooting involved in a cattle investment. After the shooting, Earp was said to have remarked to Ellsworth Mayor Miller that if it was his business, he would arrest Thompson or kill him. The mayor immediately made it Earp's business by making him marshal and ordering him to arrest Thompson. As legend has it, Earp acquired a pair of Colt 45's and backed down Thompson in front of a number of Thompson's supporters, taking away his gun. Earp then escorted him to the courthouse where Thompson was fined just twenty-five dollars and his gun returned. Supposedly Earp was so disgusted, he threw his badge down in front of the mayor and left town (Wilson 1979).

In 1872, the governor of Kansas signed into law the "herd law" which forced drovers to herd their cattle in place of requiring settlers to fence their claims for protection from loose livestock. The new law

gave county commissioners the power to impose herd laws at will. This began four years of conflict in Ellsworth County between urban businessmen relying on the cattle trade along with their friends in the rural areas surrounding Ellsworth who quartered and raised stock pitted against homesteaders and those who primarily farmed. A conflict already existed as related earlier in the Powers-Norman incident. The herd laws became the focal point as political fights erupted over whether to have a herd law and how severely to enforce it if they did. Each year as winter approached, Texas drovers who had been unable to sell or ship their cattle, sold out for low prices to resident stockmen. The cattle were bought cheaply, branded and turned loose to graze in unsettled public domains until spring, when the local stockmen would sell them in town. It is estimated that more than 40,000 head were wintered in Ellsworth County in the winter of 1871-1872. Damages done to farmers' property by these roaming herds was hard to recover since ownership was hard to prove. Homesteaders demanded protection and stockmen in defense organized the "Stock Men's Protective Association" and elected D. W. Powers as president and Arthur Larkin was elected vice president. Many new arrivals to the county dropped plans to homestead in favor of stock raising. Winfield Faris and his brother, William, took up claims on Clear Creek in 1872 to farm, but became so successful managing herds on public lands, that they let their claims revert back to the government (Dykstra 1961).

The conflict continued by the invasion of the Granger movement. In March, 1874, the county's first Grange was organized for local farmers. The conflict even cut across family lines. Edward P. Faris was a charter member of the National Grange as well as the county chapter. The Grange was for protection of the farmer from the open range. The range cattle industry, as distinguished from the succeeding ranch cattle industry, was based on free grass. The cattle men ranged their herds over the public domain, sometimes holding particular areas by custom or force. The Homestead Act of 1862 granted 160 acres of land to farmers, yet made no provision for the rancher, who needed much more than 160 acres to maintain a herd of cattle on the Great Plains (Dykstra 1961). The free grass that the cattlemen held was likely at any time to be claimed and plowed by homesteaders, hence a conflict. Since the average cattleman had no incentive to protect his range, he tended to the other exteme of overstocking and consequent overgrazing. This situation, combined with homesteading threat, left the cattle industry in a vulnerable situation. Low prices and bad weather tipped the scale and led to an end to the open range livestock business. G. A. Atwood, a former editor of the Ellsworth Reporter and a candidate for state representative in 1874 changed his previous anti-protectionist stand and campaigned for the herd law. He was elected. Atwood also was a property owner in the lake project area. The new editor of the Reporter, Henry Inman, likewise changed his previously anti-protectionist stance (Rasmussen 1960).

In 1873, Ellsworth had a population of 2868. Business and professional people who conducted commerce in Ellsworth included: John L. Bell, hardware store; C. B. Whitney and G. Kendall, furniture store; George Seitz, drugstore; John Montgomery and G. A. Atwood, Ellsworth Reporter newspaper; H. F. Cooley, builder; Ira Phelps, grocery store;

Mimmick and Hounson, chemicals and paints; Arthur Larkin, dry goods and later the White House Hotel; Mrs. Swenson and Mrs. Hanson, laundry; John Mueller, shoe shop; H. F. Hoesman, real estate; W. H. Brinkman, lumber yard; Boyd and Pobacker, millinery; J. C. Veatch, hotel and restaurant; Cramer and Wilson, meat market; Farrell and Stebbins, carpenters; Nick Lents, saloon; J. Ringolsky, dry goods; Isaac Broomfield, plasterer; Nunmaker, barber shop (3 chairs); Baker and Stinson, clothing; J. W. Gore, Drover's Cottage (formerly of Abilene); D. L. Beach, blacksmith; Powers brothers, bank; Kelly brothers, hotel, bar and livery stable; and Pincus, a French restaurant. There were many others, but this gives a view of what was located in Ellsworth proper (Wilson 1979).

The year of 1874 was more a year of tragedy than progress. That was the year of the grasshopper raid in July and August. The pests came out of the northwest and so damaged growing crops that homesteaders were completely wiped out and had to seek assistance from the state. Also in August, Ellsworth's second big fire (the first was in 1869) swept the entire block east of present-day Douglas Street between Main and First Streets (Ellsworth Co. Cen. 1967).

Additionally, in 1874, the tide began to turn against the cattle trade. That year, a petition allowed by state law was circulated in Ellsworth County that would eventually all but prohibit Texas cattlemen from allowing their cattle to roam. This was the beginning of the end of Ellsworth's days as a cowtown. A new state Herd Law in 1876, was the death blow. However, Ellsworth's death as a cowtown was not that simple. Since 1872, Ellsworth's main competition was Wichita, which was reached by rail that year. Wichita was also closer to Texas. By 1875, Ellsworth was nearly finished as a shipping point because there were so many homesteaders in central Kansas. The Santa Fe was shipping more cattle than any other company and eastern railroads in Kansas had taken over much of the business that once went to the Kansas Pacific. During the two decades that Kansas served as a shipping point, five million longhorns were shipped east (Zornow 1957).

The year 1874 was important for another reason. In that year, Joseph Glidden, an Illinois farmer, invented barbed wire and this would effect not only Ellsworth County and Kansas, but the entire nation as well. By the 1880s, thousands of miles of this new fencing had been strung across the plains, often across roads, rivers and in a few instances around entire communities. "Barbed wire wars" resulted, pitting rancher against rancher, cattleman against sheepman and herder against farmer. By installing these fences the cattlemen were unwittingly destroying their previous way of doing business. On a truly open range, cattle could take care of themselves in any weather, instinctively finding water during droughts and drifting safely downwind during blizzards. Barbed wire prevented this movement and during winter storms drifting cattle piled up and died by the thousands. Barbed wire brought an end to the open range and converted it into big pasture country. The big money days for the cattle industry began to end. Overproduction drove prices down and a lot of areas in the Great Plains were overgrazed. The dry summer of 1886 left stock in poor condition as winter approached. The winter of 1886-1867 was an unusually severe one all over the Great Plains and Ellsworth County. It was a disaster for

the giant cattle industry. After that winter as the industry revived, it was rejuvenated on a smaller and more efficiently organized scale (Wood 1980).

Agriculture and Ranching

The first radical change in Kansas agriculture also came in the pivotal year of 1874. That year a colony of Mennonites came to central Kansas from southern Russia. Originally from Germany, these bearded farmers had migrated to Russia at the time of Catherine the Great to evade military service to which they were opposed on religious grounds. During their stay in Russia, they developed a variety of hard wheat called Turkey Red because of the color of the grain and because the seed had originally been obtained from Turkey (Rasmussen 1960). This variety thrived on the steppes of Russia (a semi-arid plains region) and the Mennonites believed it was adapted to the peculiar conditions of climate and soil of central and western Kansas. Turkey Red grew better in Kansas than varieties of the grain brought by earlier settlers from their eastern farms because it was more drought resistant and hardy. Observing the success of this new wheat, Ameican-born farmers in Kansas bought the seed and began to prosper. Prior to this innovation, corn was king. Before 1874, Kansas had never produced as much as five million bushels of wheat in a year. In 1974, Ellsworth County alone was producing four million bushels. A new era had been born (Wilson 1979).

In 1874, Ellsworth County had 6966 acres in cultivation and only about 1000 in wheat and 3500 in corn (Table 1). Various crops of oats, rye, potatoes, millet and others made up the rest. In 1874, Ellsworth County produced 5200 pounds of cheese and 11,975 pounds of butter. The county had 952 horses, 44 mules and donkeys, 4807 resident cattle, 892 sheep and 941 swine. Thirteen acres of nurseries and 110 acres of orchards dotted the county (Annual Report 3). By 1877, the county had more than six times its wheat acres of 1874 and by 1880 the county had 54,000 acres in wheat production (see table below) (Ellsworth Reporter 11-22-1877, Commonwealth 1880).

In 1874, another historic event for Ellsworth County was the arrival of the first group of Bohemians from what is now a part of Czechoslovakia. The great grasshopper raid of that year turned them all back except Francis Swehla. Swehla pushed on and settled near Wilson. He later brought in other Bohemian families who settled around the project area in the late 1870s and 1880s. Most settled near Wilson (Wilson 1979).

Oddly enough many of the early settlers in the 1870s and 1880s had an abundance of cheap coal for heating. There were at one time seven locations where coal was removed in the county. This low grade coal was dug by hand, usually by the customer (Wilson 1979).

In 1879, the "Compendius History of Ellsworth County, Kansas" was printed. It was written and dedicated "to the early inhabitants of Ellsworth County as a token of appreciation for the hardships endured, the bravery displayed and the generosity bestowed in the founding of

this prosperous portion of the New World." The preface also admits that the primary object was to attract the "emigrant and home-seeker". In other words, a promotion pamphlet. It gives the population of Ellsworth City that year at 1040 (Lyon 1879). Ellsworth had "three church organizations, a grade school, a courthouse, several fine blocks of buildings built of limestone, including a bank and fine Masonic and Oddfellows halls and public hall...two four-story flouring mills, three steam grain elevators and iron bridge over the Smoky Hill River, two weekly newspapers..." and hotels (Wilson 1979).

Three settlers who came to Ellsworth County in the 1870s and 1880s who bear mention are E. W. Wellington, Frank Bates and William Gile. Wellington was a Harvard graduate who first came to Ellsworth County in the 1870s. He established two successful ranches: the Wellington Ranch and then the Monte Carneiro Ranch both near the former town of Carneiro. The Wellington Ranch he later sold to a man named Adams who he brought to the area. Wellington started out as a sheep rancher. When he later moved to Ellsworth, he decided the town needed a sanitary sewer system, so he built what still forms the core of the present-day system. He also built many of the principal business buildings in downtown Ellsworth that later became known as the Wellington Block. He was prominent in the Masonic lodge and started a National Guard unit. Visits by Boston friends to the Monte Carneiro Ranch and the parties and socials given at the new Wellington home in Ellsworth brought an eastern air of sophistication to this area of the country (Wilson 1979, Wilson Interview 1984). Bates, a Bostonian and also a Harvard graduate,

Table 1. Agricultural production in Ellsworth County From 1874 to 1981.

	1874	1900	1910	1920	1930	1940	1950	1960	1972	1981
CROPS (thousand acres)										
Wheat	1.0[1]	110.0	135.0	128.0	148.0	77.0	120.0	110.0	100.0	125.0
Corn	3.5	40.0	84.0	33.0	33.0	4.0	5.0	2.0	.5	.2
Oats				16.0	5.0	8.0	4.0			
Sorghum				10.0	9.0	34.0	28.0	34.0	21.0	19.0
Alfalfa					3.5		4.0	6.0		
Barley			4.0	10.0		7.0				
VALUE*		1.6	2.6	6.0	2.0	0.8	4.3	5.7	8.3	16.0

continued

Table 1. continued. Agricultural production in Ellsworth County From 1874 to 1981.

	1874	1900	1910	1920	1930	1940	1950	1960	1972	1981
LIVESTOCK (thousand head)										
Horses	.9	7.0	9.0	10.0	5.0	3.0	1.4	.6		
Cattle[2]	4.8	40.0	30.0	27.0	32.0	29.0	36.0	42.0	55.0	38.0
Sheep	.9	.2					2.0	1.8	.6	.6
Swine	.9	8.6	15.0	5.5	7.0	4.0	3.0	2.5	7.5	6.0
Chickens							135.0	77.0	18.0	
VALUE*		1.5	2.3	3.0	1.7	1.3	4.3	5.1	8.3	9.3

*Value in millions
[1]-By 1880, Ellsworth County had 54,000 acres in wheat
[2]-Resident Cattle

established his ranch in 1882 and like Wellington started raising sheep, eventually converting successfully to cattle. He co-owned this ranch with a man named Richardson and it was called the White Bluff's Ranch (Wilson 1979). Gile came much earlier in 1872. Although not as well landed as Wellington and Bates, his farm was located on both sides of what is now the Kanopolis Dam. He and his wife are buried in a two-grave cemetery just east of the north end of the dam. He was a Civil War veteran and the postmaster of the Venango post office. He was a lifelong Democrat and called the first party meeting in the county serving as county party chairman for years. He also ran and was defeated for Congress and enjoyed considerable political influence elsewhere in the state. He died in 1904 (Wilson 1979, D.A.R. Cemetery Records 1929-1930).

The Millett Ranch

The transition from the cattle trade to cattle ranching in Ellsworth County is illustrated, albeit in an exaggerated way, by the story of Captain Eugene B. Millet. In 1876, Millett built a ranch headquarters on land he bought the year before on Miller Creek, just north of the Brazos River, in Baylor County, Texas. There he experimented with upgrading his cattle by bringing in good Durham bulls, a Shorthorn breed that inherited immunity to Texas fever. Registered cattle were considered impractical by his neighbors in Texas and also later by his neighbors in Kansas. When he sold his Texas ranch, he kept his Shorthorns and moved them to Idavale. While he specialized in Shorthorns, Millett also raised Hereford, Jersey and Aberdeen Angus cattle and experimented with cross breeding, at Bluff Creek. The Miller Creek Ranch became the famous Hash Knife Ranch.

In 1875, while on a trip to Kansas City, Millet met Ida Mabel Burtner of Quincy, Illinois. He was 37, a bachelor and as rough and tough as any rancher. She was the daughter of a judge and had been brought up in a refined atmosphere, but it was not entirely the attraction of opposites. Millett retained the manners of a southern gentleman and the influences of his school-master father and Christian upbringing. They were married in Quincy, September 6, 1876. His brothers, Alonzo and Hiram, were there as were many friends of the bride's family. His sister, Laura, was a bridesmaid. On their honeymoon, they visited the Philadelphia Centennial and principal cities of the east.

After several months in Texas, they bought a home in Kansas City. A chair made from eight Texas cattle horns was a conversation piece in this impressive brick home atop a bluff between 6th and 7th streets now a part of downtown Kansas City. (The chair is now in the Museum in Ellsworth.) There Laura Millett married Henry Smith, and there Eugenie, daughter of Captain and Mrs. Millett, was born. She grew up in Ellsworth County, married Russell Bates, the son of another very successful Ellsworth County rancher. They lived for 35 years on what became the Sherman Ranch.

Some indication of the financial position of the Milletts during their residence in Kansas City is shown by the fact that they bought the south half of Landes Court at 18th and Broadway for $150,000 as a non-ranching investment. In the early 80's, the Milletts sold their Kansas City home, lived in the Landes Hotel for a few years and then moved to their Ellsworth County ranch. This ranch, which he called Idavale, was purchased from the Powers brothers, 2080 acres, and from adjoining landowners until 38,000 acres was included and it was the largest ranch in Kansas. (The Powers' headquarters and the Sherman Ranch headquarters were on the same site.) Millett built a two-story, ten room house near the mouth of Bluff Creek. Verandas ran around the three sides. A T-shaped bunkhouse and small houses for married ranch hands were built. A cow barn 50 x 150 feet, and a horse barn 60 x 100 feet, both with hay lofts and the usual sheds, corrals, grain cribs, feed lots, etc. were added. This set of buildings was torn down when the government acquired land for the Kanopolis Reservoir and the site is now under water. For a time, the Milletts lived in Kansas City in the winter but about 1886 made Idavale their permanent home. Among the cow hands were two blacks. One, Jeff, had been with the Milletts before, during and after the Civil War. Millett also used black cooks.

Here, as in Northwest Texas, Millett began stocking purebred cattle, but he had rough cattle too and he not only fenced his entire acreage but divided his land into separate pastures for his purebred and for cultivated areas. Both substantial fences, 3 strands of wire and red cedar posts, and registered cattle were considered impractical in this area in that day. Numerous springs, including a large spring behind the house and the Smoky Hill River, Thompson and Mule Creeks provided water to all the divisions of the ranch, more than 20 miles of running water in all.

Millett belonged to the Ellsworth County Old Settlers Association, the Cattlemen's Association, took an active part in politics and in horse racing circles. At one time, he had a string of 100 or more

racing horses, both trotters and pacers. In fact, the ranch began to lose money because of the emphasis on these horses bred from Kentucky sires. These were worked on two half mile tracks, with G. E. "Gil" Curry as trainer. Millett, L. H. Westerman, Arthur Larkin and others organized the Ellsworth Driving and Fair Association. (The big bell used to start races is hanging in the Livery Barn at the Museum.) They built a track at Ellsworth. The big event of the opening day for the track was a race between "Edward L." owned by Larkin and "Dal Brino" owned by Westerman -- for a $400 purse.

Everything about the ranch was first class. He usually had 2500 to 3000 acres in crops with quality stressed. 40,000 bushels of corn, 8000 bushels of oats, and 1500 tons of hay were not unusual returns for a crop year. Purebred cattle and seed selection were unheard of in the area as was his practice of exhibiting his best cattle at the Kansas City Fat Stock Show, the forerunner of the American Royal. Naturally, these activities brought many visitors to see this most unusual ranch. He was proud of his fields and his livestock, but his real pride and joy was "Hell Cat," a huge longhorn steer standing 16 hands and weighing 1395 pounds, with horns 7 feet from tip to tip. On Sunday, in good weather, horse races, bronco and steer riding entertained visitors, but Millett also kept ten wolf hounds and three coon dogs. Running coyotes on horseback behind big, fast hounds was a favorite sport.

The ranch grove was the place where everyone in that prt of the county gathered each 4th of July, and after 1885, an annual barbecue was held. Early in 1890, the ranch hands formed a minstrel group that entertained in school houses and towns all over the country.

The blizzards of the 1880's, especially the blizzard of 1886, broke many cattlemen. Millett came through this period all right but he still owned a couple of big ranches in Texas and had many ranching friends -- all in financial trouble. He loaned money which was never repaid and finally had to mortgage his Texas properties. Then, rather than lose them, he mortgaged Idavale. The panic of 1893 hit and he lost all of this land.

Idavale was divided. Most went into what became the Sherman Ranch. About 2000 acres, including the ranch house, race tracks and barns, became part of the Olaf Larson Ranch. The bottom land along the Smoky Hill, the site of Idavale, and the lower ends of Thompson and Bluff Creeks was all covered eventually by the waters of Kanopolis Reservoir.

Millet moved to Ramona, Kansas. He lived there for several years, raising and selling blooded animals. He was then 68 years old, but his decision was to try to make another fortune. Leaving his wife and their one daughter, Eugenie, in Kansas, he went to New Mexico and began building a ranch on the Colorado River. It was too difficult a job for a man of his age, and although he refused to give up, his neighbors finally wired his daughter that he was in pitiful shape. She finally persuaded her father to return to Ellsworth County with her. In the fall of 1916, he left for California to spend the winter. He died there, at the home of his sister, at the age of 78. His body was brought back to Ellsworth for burial. Millett was a pioneer of the

Texas cattle trade, a pioneer in Ellsworth County, and a pioneer in the raising of purebred livestock and diversified farming. (Ellsworth Co. Hist. Soc. pamphlets).

During the late 1870s and 1880s stockmen such as Millet, Wellington and others began buying up vast tracts of land because of the growing cattle raising industry. As early as 1883, a number of very large ranches existed in the county. That year the Elkhorn Ranch owned by H. C. Adams contained 4000 acres, on which he had 5000 sheep; the Eden Ranch on the Smoky Hill owned by a man named Collins contained 9000 acres, all fenced with a large number of cattle; the Idavale Ranch had 18,000 acres in that year and about 5000 head of cattle; the White Bluffs Ranch of Richardson and Bates had 3000 acres and 3000 head of cattle: Black Walnut Ranch on Thompson Creek contained 5500 acres and was owned by H. B. Clark with 7800 sheep and 250 head of cattle; Wellington's Monte Carneiro Ranch contained 7000 acres with 9000 sheep and was probably the finest ranch in the county with $16,000 in buildings, half of which was spent on the main house. These six ranches represented ten per cent of the land area of the county in 1883. Besides these six, there were several smaller ranches ranging from about 1000 to 2000 acres. Such extensive land holdings for ranching greatly inhibited population growth. In fact, the county actually lost population in the 1880s. This is the main reason the county remained sparsely populated well into the Twentieth Century (Andreas 1883).

Before Ellsworth County settled into a peaceful community in the early 1880s, it experienced a last bit of violence. In 1881, three murders took place within a four-mile radius and within a period of ninety days. Andrew Weir and his son Bennie lived on a farm adjoining Lewis Rose and his wife. The two families had been feuding for some time over a division of crops. In October, a quarrel arose one evening when Weir went to the Rose home. As Weir was leaving the house, Lewis Rose followed and shot him to death. After some time, Bennie began to miss his father and went to the Rose house to find him. When he arrived, Rose took him to the barn and clubbed him to death. Bennie was only twelve years old. Rose and his wife buried the two Weirs, but a later investigation and trial in May of 1882 found the Roses guilty of murder and they both were confined to a penitentiary (Andreas 1883).

Around the same time as the Weir murders, W. E. Graham Angley came to live with his uncle, Phillip Angley, who lived in a dugout in the southeastern part of the county. The elder Angley had just acquired some money from land he sold to a neighbor. When he returned to the dugout, his nephew murdered him in his sleep and set fire to the dugout. The nephew was caught some days later in Ellsworth and arrested for his uncle's murder. The following year, 1882 saw another murder when Fred Sternberg, son of Levi Sternberg, shot and killed a ranch hand named Hughes. Sternberg was thought to be insane (Andreas 1883).

The early 1880s were the years when Ellsworth County began to grow industrially. In 1881, the Ellsworth Sugar Works Company was formed and an extensive sugar mill erected on the west edge of Ellsworth City. The sugar mill employed seventy-five people and produced 30,000 gallons of cane syrup in 1882. By 1882, the coal discovered earlier was needed on a more commercial basis. It is estimated that around 6000 tons were

mined in 1882 in the county. This made fuel readily available, in the absence of timber, to settlers at a reasonable cost to meet all home, ranching and business needs (Ellsworth Co. Cen. 1967).

Kanopolis

Still another episode in the colorful period of Ellsworth County is the establishment of the city of Kanopolis. After Fort Harker was abandoned in 1873, it was opened for settlement by an act of Congress in 1880. Kanopolis was the brainchild of a group of Ohio businessmen who formed the Kanopolis Land Company in 1885. In a promotional pamphlet published the following year, which is a combination of wishful thinking and outright deception, these land promoters advertised and laid out a town that would become, they said, the Kansas Metropolis, thus Kanopolis. They proposed, among other things, that this new city in the center of Kansas should become the state capitol and would even make a prospective national capitol being located in the geographic center of the nation. The company had $500,000 in capital and laid out the city of Kanopolis on 5,000 acres, sufficient they felt for 150,000 inhabitants. Ross Mitchell, a Springfield millionaire, was president of the land company; Francis Bookwalter, vice president; John H. Thomas, treasurer; General J. Warren Keiffer, attorney for the company; J. S. Crowell, secretary; and various other members coprised of Ohioans and Kansans (Kanopolis 1886).

On May 12-14, 1886, 4000 lots were offered for sale, with four square blocks set aside for a state capitol building site. Hundreds of people from across the country were on hand and others sent orders by mail, to buy lots ranging in price from $300 to $1000. The 17 promoters who owned the Kanopolis Land Company had a collective personal wealth of around $30 million. They were not just hucksters, but businessmen who actually believed in this extravagant scheme. Many of the buyers of lots threw up business and manufacturing buildings. By 1887, a woolen mill, iron foundry, carriage works, hotel, drug store as well as others dotted the Kanopolis landscape. But the legislature showed no interest in moving the capital from Topeka. In 1887, the city was actually incorporated. In 1888, the voters were offered a proposal by the Land Company to build county buildings if they would move the county seat to Kanopolis and if the cost did not exceed $50,000 - a lucrative offer. It failed by only a few votes. The bubble then burst. A final gasp occurred in 1893 when the bogus populist House of Representatives in Topeka passed a bill locating the state capitol at Kanopolis. It was passed primarily because the Shawnee County sheriff sided with the Republicans in the legislative war. When the bogus legislature died, the Kanopolis capital removal bill died with it. And with it died also the hopes of Kanopolis and the dream of a capital city faded forever as the Kanopolis Land Company went into receivership (Topeka Daily Capital 4-26-14).

The 1890s were a decade dominated by Populist politics in Kansas. In October, 1890, the Kansas Farmers' Alliance, a forerunner and then a branch of the Populist party, met in Ellsworth. A parade was held in which 228 wagons, from pony carts to lumberwagons, participated. They met at the GAR reunion grounds. One of the speakers was Mary Lease, the

Populist leader, who the Ellsworth Reporter described as "an agitator who makes her living by the sweat of her jaw". The Populists had swept Senator W. B. Helm of Ellsworth and "sockless" Jerry Simpson into office because of the dissatisfaction of voters with both of the major parties (Wilson 1979).

In 1892, the Populists elected Lorenzo D. Lewellen governor. The Republicans which had lost the Kansas House of Representatives in 1890, regained it in 1892, but the Populists claimed election fraud. Both parties organized the House and elected a Speaker in 1893. Confusion reigned. Opposing members, armed with weapons, slept in their seats so the opposition members could not take their seats. Finally the Supreme Court ended the confusion by ruling in favor of the Republicans. That is why the vote in the legislature to move the state capital to Kanopolis was claimed to be by a bogus or outlawed legislature. The Populists finally faded out of the picture and became absorbed by the two major parties but not before they had adopted many of their reforms in Kansas. The Populists made life for industrial workers safer and helped the farmer by regulating stockyards and providing for proper inspection and weights and measures for grains. They also created a state bank commissioner's office and adopted the secret ballot. The Populists also were advocates of women's suffrage. As the Nineteenth Century ended, Ellsworth County was established as a prime agricultural county in the state and nation (Richmond 1974).

Mother Bickerdyke House, Schools, Churches and Post Offices

Another interesting enterprise began in Ellsworth County when Arthur Larkin and his wife conveyed 160 acres of land to the Grand Army of the Republic (a Union Civil War veterans organization) in 1888. It was donated to the GAR for the purpose of holding reunions of Kansas members every two years. The title said that the land would revert to the State of Kansas to be used for charitable purposes only if the reunions were not held. That same year the Kansas Legislature appropriated $36,000 for building construction on the site. Two reunions were held in 1890 and 1892, but failure to hold another in 1894 forfeited the land and buildings to the state. It became a few years later the famed Mother Bickerdyke Home for mothers, wives and minor children of Union veterans. It was named after the famous Civil War nurse who took a personal interest in it after she moved to Bunker Hill, Kansas, where she died in 1901. The Home remained in existence until 1952 when the remaining widows were transferred to Dodge City under the care of the Good Samaritan Society (Wilson 1979).

Education developed in the period 1866-1900 in Ellsworth County first in the homes of settlers and then as the population increased, in regular schools. The first school in Ellsworth County was a dugout on the bank of Thompson Creek near the original Hudson family homestead. It was started in 1866 with Rachel White as the teacher. The school district was organized in 1867 and in that same year the school was moved to a dugout on the Scats homestead and Maggie Hudson was the teacher. Due to the Indian scares the site was again changed and a log

cabin was built in 1868 on Thompson Creek. One of the students in this school was a twenty-seven year old black man, Hamilton Harvey. The remains of this log cabin were still visible as late as 1967 (Ellsworth Reporter 8-3-67). The first school in Ellsworth City was a small frame building south of town built prior to 1868. The first school in Kanopolis was organized in 1889 on land purchased from the Kanopolis Land Company. School District No. 38, Vingst School and No. 51, Raddiffe School in the lake project area were both named for families nearby.

The Faris Caves also served as a school. The Faris Caves are a true landmark of the early day settlers of Ellsworth County. They are named after the Faris family of five brothers, who settled in the area in the late 1860s and early 1870s. After moving to Ellsworth County in 1872, they raised livestock. In 1893, William and Winfield Faris purchased the present site of the Faris Caves, a tract on the Smoky Hill River, from Charles Griffee. Prior to Griffee the tract had been owned by G. A. Atwood, who raised sheep and who was credited for having built the first fences in the area. A high bluff sixty feet high on the east bank of the river made a natural shelter for a home, so Griffee dug three caves in the Dakota sandstone bluff. The caves were approximately twelve feet square and ten feet high. In 1899 and 1900 the southernmost cave was converted into a school room and for two years it was the school room of Robert Faris (son of Winfield), and Ella and Gertie Straley, daughters of Mel Straley. Nora Faris, daughter of Amzi Faris, was the teacher. A fireplace furnished heat. One of the rooms of the caves was cemented inside and on one wall a trench was made, through which spring water ran continually. The Faris' used this as a milk room, putting crocks of milk in the cool water to preserve freshness. A large house, outbuilding and stockyards were situated on a level tract of bottom land, lying between the river and the high rocky sixty-foot bluff. Winfield Faris had married Jessie Hudson in 1886 and some Hudson family members eventually owned the site. The caves were occupied as a homesite as late as 1947 (Ellsworth Co. Hist. Soc. pamphlets).

Churches followed the schools. In 1870, the Church of the Holy Apostles became the first church in the county; it was built in Ellsworth. It was destroyed by fire in 1874. In 1873, a Catholic Church was built on land deeded by Perry Hodgden. The Arthur Larkin family was the first Catholic family in the county. In 1883, a Methodist Church was erected in Ellsworth, followed by a Baptist Church in 1887, then a Lutheran and in 1890 an African Methodist Episcopal Church (Ellsworth Reporter 8-3-67).

Early post offices were established in the county beginning with Fort Ellsworth in 1865; Ephraim Warner served as the first postmaster. Fort Harker supplanted that post office in 1866 with Vincent B. Osborne as the postmaster. The first post office in Ellsworth was started in 1867 and George Geiger was the first postmaster. Two post offices in the project area of interest were at Farisville and Venango. Both started in 1875. The first postmaster at Venango was Ellis Hughes. He was later replaced by William Gile. The Farisville post office had as its first postmaster Erskine Becker, then Mrs. Henry Faris and later Mrs. William Doan. Farisville was named for Henry Faris and was located

southeast of present-day Kanopolis. Faris was the second assessor of Ellsworth County. After Ellsworth County was organized in 1867 he was made a township trustee and also served for a time as Justice of the Peace. He ran unsuccessfully for the state legislature in 1874. He also helped organize the country's first school district and served as a member of the school board. He died in 1928 at the age of ninety (Wilson 1979).

Salt and Other Natural Resources

As the dream of Kanopolis' potential greatness started to fade, proprietors of the Kanopolis Land Company discovered salt in 1887. This salt vein was 250 feet thick. James Cowie, Sr. was one of the first promoters of rock salt mining in Kansas. Before coming to the state he was a mining engineer in the coal fields of Pennsylvania and was considered one of the foremost mining engineers in the country. He came to Kanopolis in 1890 and began sinking a shaft for the Royal Salt Company (Figures 7 and 8). The plant was completed and began full operation in 1891. Cowie was the superintendent of the plant for a number of years. His sons, Daniel and George, also were connected with the plant (Ellsworth Reporter 8-3-67).

Other salt companies followed. The Crystal Salt Company was organized in 1906 and Cowie resigned his post with the Royal to promote and supervise the construction of the building and sinking of the shaft. Lump and crushed salt were produced in 1908. Cowie remained with the company until his death in 1911. A Chicago syndicate organized the Independent Salt Company in 1913 with Daniel Cowie as superintendent. The shaft was sunk in 1913 and the plant was put into operation in 1914. At Ellsworth a different method of obtaining salt was used. A well was drilled, and the rock salt stratum was found at 650 feet depth. The brine was forced to the surface and moisture evaporated leaving the salt. The Ellsworth Salt Company was organized in 1902 with H. Work, president; J. R. McLaurin, vice president; George Trenble, secretary; B. S. Westfall, treasurer; and E. W. Moore, manager. Work on the plant began in 1903 and operation began that same year. It consisted of four large steam grainers, with a producing capacity of 500 barrels of salt per day. It had a complete dairy mill for manufacturing table and dairy salt. The plant was operated steadily until 1909 and then only part time until 1913. Another company, the Monarch Salt Company started in Ellsworth in 1890. It was shortlived. The mines brought in Italian, Greek and Mexican miners to work them. The Independent mine was financed by grants of $50,000 each from Swift and Armour meat packers. They used salt to preserve meat for shipping. Later a major use of crushed rock salt was to remove snow and ice from streets and highways (Wilson 1979).

The Royal Salt Company stayed in production until 1923, when it closed down and the machinery moved to the Bevis Salt Company at Lyons. The Crystal Salt Company continued to operate until 1941 when the shaft caved in. The Morton Salt Company of Hutchinson then took it over, retimbered it and produced salt until 1949 when the shaft deteriorated again. The mine was then shut down and the machinery dismantled and shipped to Avery Island, Louisiana. Swift and Armour continued

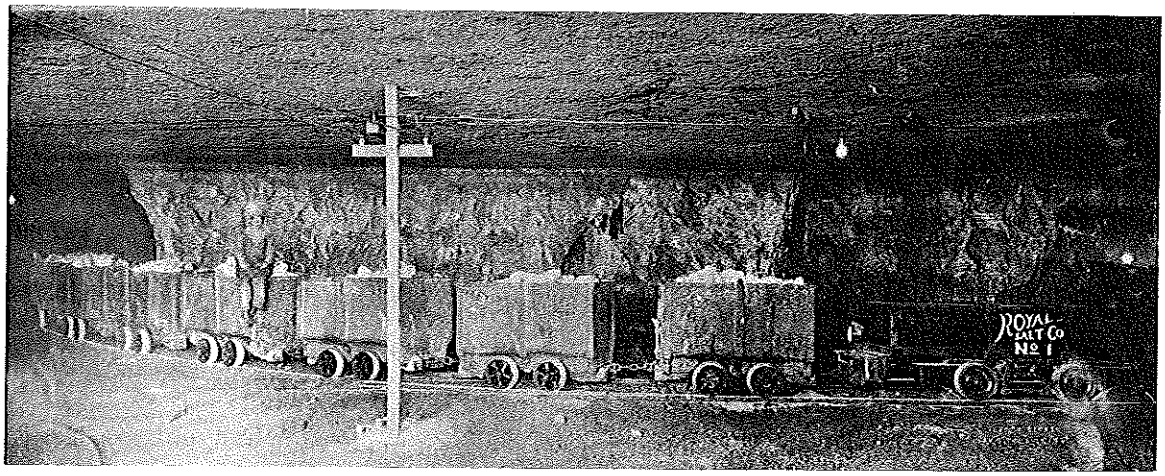

Figure 7. Salt mine at Kanopolis in operation between 1890 and 1924 (Courtesy, Kansas State Historical Society).

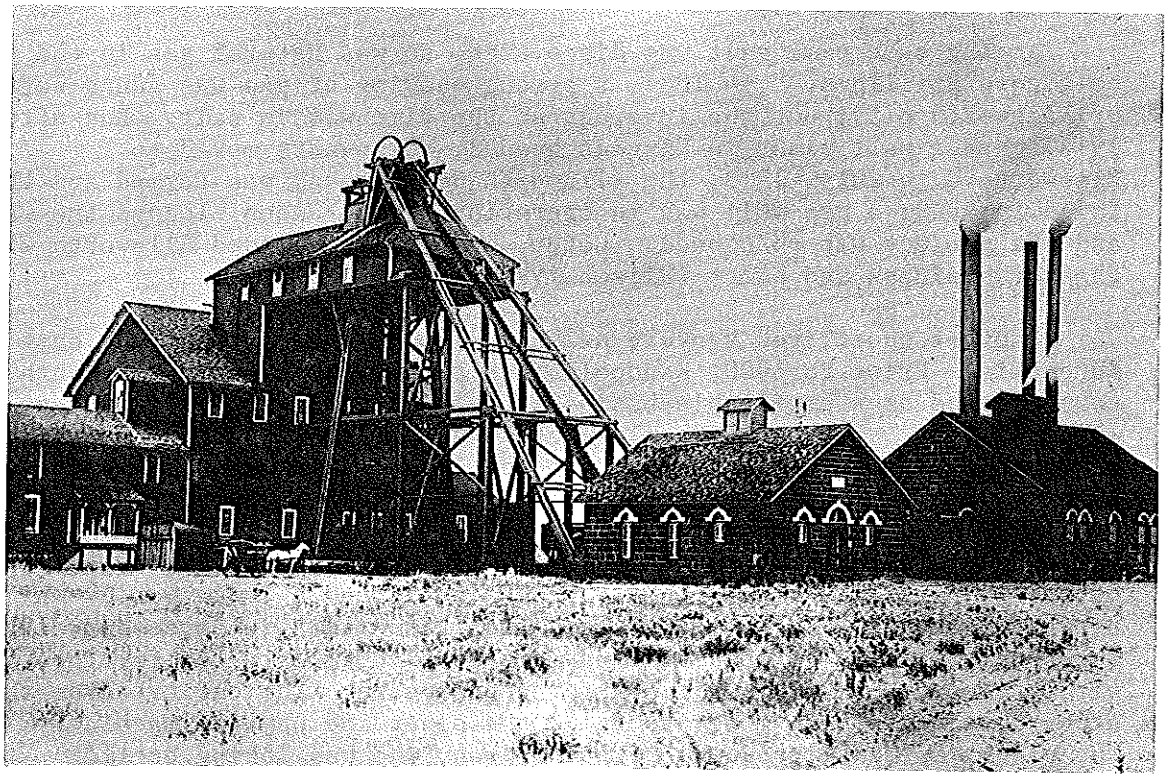

Figure 8. Royal Salt Mine at Kanopolis, probably early 20th Century (Courtesy, Kansas State Historical Society).

operation of the Independent Salt Company until 1969 when they sold out to three Chicago businessmen who continued to operate the plant into the 1980s (Hand 1978).

The salt industry was important economically for Ellsworth County. It employed people and contributed to the local economy. Kansas, in 1914, produced one-third of all the salt in the United States. It was a major industry well into the Twentieth Century and was particularly important to Kanopolis. Thanks to the salt mines, Kanopolis boasted in 1914, two churches, a bank, newspaper, two lumber yards and about a dozen other businesses. The town had just opened a $33,000 municipal water and electric plant and had 220 students enrolled in the school (Topeka Daily Capital 4-26-14).

Also, around the turn of the century, Ellsworth had established itself industrially with a sugar works, a bottling plant and several mills, the largest of which, the Weber Mills, was built in 1919 and owned by the Central Kansas Mill and Elevator Company. In 1900, Ellsworth erected a new hospital and had two doctors, Harry O'Donnell and H. Z. Hissem, who had previously practiced in the Mother Bickerdyke Home. These doctors built a fourteen bed hospital with a sky-lighted operating room. In 1921, the Ellsworth Hospital Company was organized and a new building erected at a cost of $100,000. This new building was a four-story, fireproof brick structure which existed until 1952 (Wilson 1979).

At the same time salt was discovered, so was natural gas in the salt core drillings. In 1887, a strong showing of gas was found north of Ellsworth city, but the interest at the time was in salt. But after 1913, when a salt plant in Kingman burned, the owners moved to Ellsworth. In July, 1913, the Ellsworth Gas Company was formed and the following year a gas well was in operation. Water soon flooded the well and the project was abandoned. Later, gas wells provided Ellsworth with gas for business and homes (Wilson 1979).

Another shortlived venture at Kanopolis was the brick plant east of Kanopolis. Prior to 1900, Kanopolis had two brick plants. One south of town started as a profitable business, but was later bought out by a major company. The Saint Charles Hotel was built with brick manufactured in this plant. The second plant located west of Kanopolis suffered the same fate. With the success over the local brick industry, the Kanopolis Clay Products Company was formed under the local leadership of George Ollman and J. J. Kuntz and was financed by the sale of stock. A site was chosen east of Kanopolis and a lease was drawn between George Hurst, who owned the land, and Ollman in September, 1914. Terms of the lease called for a payment of five cents a ton for the clay with a minimum of $300 per month for fifty years. The capital from the stock provided enough money to build the plant and pay for machinery. The plant went into production, but Ollman, who was making bootleg whiskey on the site as well, left the second load of clay on the fires unattended and the ovens ruined. He then skipped town. Ollman later contacted Amel Milbrandt to haul the machinery to town and sell it for junk. The only brick manufactured in the plant was used to build the home of Oliver Bircher, which still stands today. A brick plant still operates in Kanopolis today (Ellsworth Co. Hist. Soc. pamphlets).

The Sherman Ranch

Of course, stock raising and agriculture continued to be the fundamental economic baseline of culture in Ellsworth County and particularly in the Kanopolis project area. The ranching and business operations of Merritt M. Sherman was typical in many respects to some of the activities of other stockmen in the area during the 1890s and well into the Twentieth Century. Sherman was as fascinating as he was successful. Sherman was born in New York and attended Cornell University for three years when his health began to fail. He went to Arizona Territory for the climate and started the school system at Tombstone. He was superintendent of schools there when Wyatt Earp and Doc Holiday had their famous shootout with the Clantons at the O. K. Corral. While in Arizona, Sherman became interested in cattle and farming. Sherman's uncle, Lewis H. Lapham and several partners, hired him to purchase and manage ranching property for them. About 150,000 acres of land for ten cents an acre were purchased in the State of Sonora, Mexico where Sherman Managed this ranch until political unrest led by Poncho Villa forced him away. Sonora was the home of Villa and he frequently rustled cattle. The Mexican ranch was left in the charge of Juan Durand, who continued to supply cattle and horses to the later Kansas ranch until about 1925 (Andrews 1980).

The Sherman Ranch was established in Ellsworth County during 1896-1989, again financed by Lapham. It eventually took in most of Millet's Idavale Ranch and a later large ranch owned by a man named Clauson. In fact, the Clauson Ranch main house served as the headquarters for the Sherman Ranch from 1898 to 1902 when the base of operations was moved to the Burton Ranch. From 1905 to 1940s, the Bluff Creeks Ranch house served as headquarters. The Sherman Ranch consisted of about 25,000 acres, and another 10,000 acres were leased. It was one of the largest ranches in the United States. Some claimed it was the largest fenced ranch in the world. The Mexican Ranch produced stocker and feeder cattle and Sherman matured them on the Kansas grass ranch before they went to market. The Sherman Ranch produced Shorthorn bulls and served as a hog-fattening ranch as well. During many years of operation as many as 10,000 hogs were fattened and shipped along with the cattle-feeding business. From 1896-1912, the river bottom land was planted to provide feed for the cattle and hogs. Corn and stocks were fed to the cattle. Alfalfa and corn were the mainstay of the hogs (Andrews 1980). In 1913, an epidemic of cholera killed thousands of hogs; from that point the operation turned more to grain producing to fill demands of World War I. In 1918, about 11,000 acres out of the 25,000 owned by the ranch were under cultivation; 7000 in wheat, 2500 in corn, 1700 in oats. Sherman had a mechanized farm by this time with tractors, binders and other equipment. He employed about 200 people during peak seasons. For his hands he had simple rules: they "were not to drink, join a labor union, or believe in the principles of the Democratic party".

The Sherman Ranch farming operation had a rough time after the war and was broken up and rented to smaller farmers. A large part of the Sherman Ranch acreage was in the project area and some of it is now underwater. With about half of the original ranch, Sherman successfully

integrated cattle raising with mechanized farming which many such farms did during this period in Kansas. His large herd of cows were the envy of many. The Sherman Ranch died during the Great Depression. In 1937, the Mexican government confiscated the Mexican Ranch. Sherman was then more than eighty years old, and after a disagreement with Lapham's heirs over the sale of the land for the Kanopolis Lake project, he retired to California. The famous headquarters was bought by area cattlemen (Wood 1980).

World War, Agricultural Depression and Natural Disasters

World War I had an effect on all the nation, Kansas and Ellsworth County. Food was important to winning the war. Kansans were urged in a national program to conserve food in "meatless Tuesdays" and "wheatless Wednesdays". Coal and other items were also conserved. It is estimated that about 84,000 Kansans served in the military during the World War. Fort Riley and Camp Funston served as training facilities for many of these Kansans. Kansas also had a War Committee on Agricultural Production as well as committees on gardening, canning, horse and machine power, highway transport and many others. All the Committees were operated under a National Council of Defense and a state Council of Defense. In addition, there were many other wartime organizations in Kansas. They included the Liberty Loan Committee, Red Cross, Y.M.C.A., War Work Council and many others. The World War proved once and for all that Ellsworth County was no longer isolated. The county had become smaller and national and international events would now have an easier impact on the county because of improved communication, transportation and a more interdependent economy (Zornow 1957).

Agriculture continued to be the economic base of Ellsworth County throughout the Twentieth Century. In 1900, the county had a population of 9540 and Ellsworth city had a population of 1651. The county had 110,000 acres in winter wheat, 40,000 in corn, and other crops totalling $1.6 million in value for all crops. Livestock in that year totalled 7000 horses, 40,000 cattle, 225 sheep, 8600 swine, and other animals totalling $1.5 million in value for all livestock (Biennial Report 12). Ten years later in 1910, crops broke out like this: 135,000 acres in winter wheat; 84,000 in corn; 4000 in barley; and other crops totalling $2.6 million in value. In 1910, livestock in the county totalled 9000 horses, 30,000 cattle, 15,000 swine, and other farm animals totalling $2.3 million (Biennial Report 17). In 1920, crops: winter wheat, 128,000 acres; 33,000 in corn; 16,000 in oats, 10,000 in barley; 10,000 in sorghum; and others totalling almost $6 million in value. Livestock: 10,000 horses; 27,000 cattle; 5500 swine; and others totalling about $3 million in value (Biennial Report 22). In 1930, crops: 148,000 acres in winter wheat, 33,000 in corn; 5000 in oats; 9000 in sorghum; 3500 in alfalfa hay; and others totalling about $2 million. Livestock: 5000 horses; 32,000 cattle; 7000 swine; and others totalling $1.7 million (Biennial Report 27). These figures show several trends from 1900-1930. First, a general trend away from corn and in favor of wheat although this shift had been more decidedly made in the 1880-1900 period. Second, a trend away from cattle and toward a more integrated

agricultural system with a more balanced emphasis on farming. Third, a de-emphasis on farming. Fourth, a de-emphasis on hogs after the cholera epidemic between 1910 and 1920. Fifth, and most important, a decrease in value of both crops and livestock showing the general farm depression of the 1920s following World War I. When the Great Depression finally came during the 1930s, it was devastating. In 1940, at the end of the decade, Ellsworth County crops: 77,000 acres in winter wheat; 4000 in corn; 8000 in oats; 7000 in barley; but 34,000 in sorghum; all crops totalling $842,000 in value. Livestock in 1940: 3000 horses; 29,000 cattle, 4000 swine; and other totalling $1.3 million in value for all livestock (Biennial Report 32). Ellsworth County's population stayed constant throughout this period.

As agriculture went, so went Ellsworth County, riding the cycles of farm economy boom and bust. From 1900-1940 there were many developments in national, state and local agriculture that effected Ellsworth County. As mentioned earlier, corn was no longer king and hogs became more important. In addition, alfalfa became an important crop. In 1904, the state legislature provided for pure food investigations at the State College and Kansas became the first state to charter a farmers' credit association in 1915. After World War I, there was a significant shift to mechanized power on the farm. During the 1920s, the number of tractors and combines doubled. Sorghums became more important for feeding livestock. The Hereford became the most popular cattle raised early in this century and the Holstein predominated in dairying. As farming diversified, chicken and egg production increased. In 1901, the first motor windmill was introduced which could elevate water 100 gallons a minute. The Kansas Farm Bureau was organized in 1911 and eventually grew into the largest farm organization in the state (Bright 1956).

If the Great Depression was not enough to discourage and ruin farmers, the "Dust Bowl" was. A six-state area including about the western half of Kansas became known as the "Dust Bowl". Caused by drought and wind, these devastating dust storms first began in 1932 and lasted severely until the end of the decade. By 1934 the National Soil Conservation Service estimated about 300 million tons of soil had been moved by these dust storms in the six states affected. The Roosevelt Administration appropriated $125 million for farm relief for farmers adversely touched. Government aid came through the Agriculture Adjustment Administration and the Civilian Conservation Corps. The Resettlement Administration and the Works Progress Administration also aided. Between 1934 and 1938, about 35,000 people left the nineteen southwestern most counties of the state in a mass migration resulting from these storms. The "Dust Bowl" did encourage better conservation of soil and water; many shelter-belt projects were also undertaken whereby rows of trees were planted to help prevent wind and water erosion (Zornow 1957).

Other natural disasters struck Ellsworth in the late 1920s. Tornadoes were frequent in the spring, but in June, 1928, a gigantic torando struck the western part of the county. About $75,000 in damage was estimated. Also, in 1927 and 1928, Ellsworth experienced two major floods, both in July, which flooded most of the southern part of the

town when the Smoky Hill River exceeded its banks (Ellsworth Reporter 7-3-75).

On July 20, 1930, John H. Tatlock and H. V. Elwell struck oil, thus the Depression was eased somewhat for Ellsworth County and vicinity. This was the first oil discovery in the area although it was known some oil existed in the region. Tatlock and Elwell hit oil at 3250 feet at the north edge of Rice County. In August, as a gas well was being drilled at the Heiken well number one, a gas flow of six million feet was hit at 3000 feet deep and on October 5, 1930, oil was found at 3200 feet. This was Ellsworth County's first oil well and was located east of Holyrood. The well, owned by Pryor, Lockhart and Slick had 1700 feet of oil standing in the hole. The stock of their company, Darby Petroleum, doubled when news of the strike spread. Those farmers and ranchers who had oil on their land leased it out for one dollar an acre and received one-eighth of the royalties for oil found. It really became a way to save these property owners from the possibility of losing their land because of the financial hard times of the Great Depression.

In 1931, the Central National Bank of Ellsworth, the city's oldest financial institution, closed its doors causing local citizens to lose for a time $1 million in deposits. A rescue operation allowed a pay-back system that recovered everyone's money by 1938. Also, in 1938, Mrs. Clara (Ma) Williford completed five years as Ellsworth's first female mayor. She was responsible for initiating the building of the present city hall (a $60,000 project), reducing the local tax levy by fifty percent, paying off $16,000 in bonded indebtedness, reducing sewer assessments by forty percent, and making vast improvements in the roads and streets (Ellsworth Co. Cen. 1967). Ellsworth County had a Negro population of seventy-six in 1938. Two outstanding area farms were run by blacks: the Nelson farm and the Roy farm. Also, the only two mail carriers in town were black and World War I veterans (W.P.A. field notes 1938).

Kanopolis Lake Project and World War II

The worst flood to ravage Ellsworth since the 1867 flood, when Ellsworth was much closer to the Smoky Hill, hit in June, 1938. Damage was extensive. Talk turned to a possible dam on the river. Action was quick. Kansas Congressional leaders pushed through a flood control act, approved on June 28, 1938, which authorized construction of a dam and reservoir on the Smoky Hill River. The project would be planned by the United States Army Corps of Engineers under the Missouri River Division, Kansas City District. In February, 1940, a team of forty people from the district office were in the area working on the project, twenty-five in the office in Ellsworth acquiring land and fifteen sinking test bores as a preliminary to actual construction (K.C. Star 2-29-40).

This activity caused quite a stir in Ellsworth. Yet unnamed, local boosters hoped it would be called "Lake Ellsworth", and would soon send tourist dollars flowing into local coffers as well as thousands of dollars in wages going to trade in the area. An estimated $9 million project, employing 300 men and perhaps as many as 1000 at its peak, no

wonder the city was abuzz. This three or four year project could only be a boom to the local economy. And when it was finished, it would be the largest lake in Kansas. A low bid of about $5,000,000 was received from a Chicago construction firm on November 18, 1940. The bid turned out to be much lower than previously estimated. The initial construction of the dam was started in December, 1940, but because of World War II, construction ceased in December, 1942. At that time the project was over half completed. The work was under the general supervision of Colonel C. L. Sturdevant, divisional engineer at Kansas City; Captain A. M. Neilson, district engineer; and Captain D. T. Johnson, head of the engineering and flood control division. World War II put an abrupt halt to this short spurt of prosperity as Ellsworth County found itself along with the rest of the country in an all-out effort to win the war (K.C. Star 2-29-40).

The war effort in Ellsworth was typical of rural Kansas. The city had a defense council and citizens were urged to ration tires, gasoline, food and buy war bonds and stamps. Practice blackouts were held periodically to prepare for possible attack. Victory gardens were grown. It was during this period that soybeans began to be produced more locally as a cash crop because of a greater need in the nation for vegetable oils after 1942. Lloyd J. Schroeder of Holyrood was the first Ellsworth County man to die in the war. In October, 1943, the Maritime Commission named one of its Liberty Ships after Mother Mary Bickerdyke. On the evening of August 14, 1945, Ellsworth County citizens listened to their radios as President Harry Truman announced the end of the war (Ellsworth Reporter 7-3-75).

Construction resumed on the Kanopolis Dam and Reservoir in 1946 and it was completed in 1948. The total cost was a little over $12 million and it was dedicated in 1948 by Governor Frank Carlson (Figure 9). By 1953, it was a 3,500 acre lake with dock facilities for boats, a swimming beach and shelter houses and picnic tables for get togethers. By 1953, 1.25 million people had visited the lake. Teamed up with the Cedar Bluff Reservoir, Kanopolis Lake provided the flood protection Ellsworth needed. When completed, the dam was a rolled earth-fill structure 15,810 feet long and had a maximum height of 131 feet above the stream bed (Kanopolis Dam 1948). The dam was credited with saving the City of Salina from severe flooding during the famous 1951 flood in Kansas. Under federal law, seventy-five percent of the revenue accruing to the government from leasing land in the reservoir area must go to the state for public schools and roads in the home county. In 1953, of the 21,000 acres purchased for the project, 11,000 acres were leased for agriculture. This resulted in about $25,000 to local government in Ellsworth County plus another $26,000 from other revenue generated. No doubt the lake also added to tourism and spin-off revenue from those visiting the lake (Topeka Daily Capital 7-12-53).

The Area Since 1950

Agriculture continued as the backbone of Ellsworth County's economic well-being. The following is a summary of farm figures from

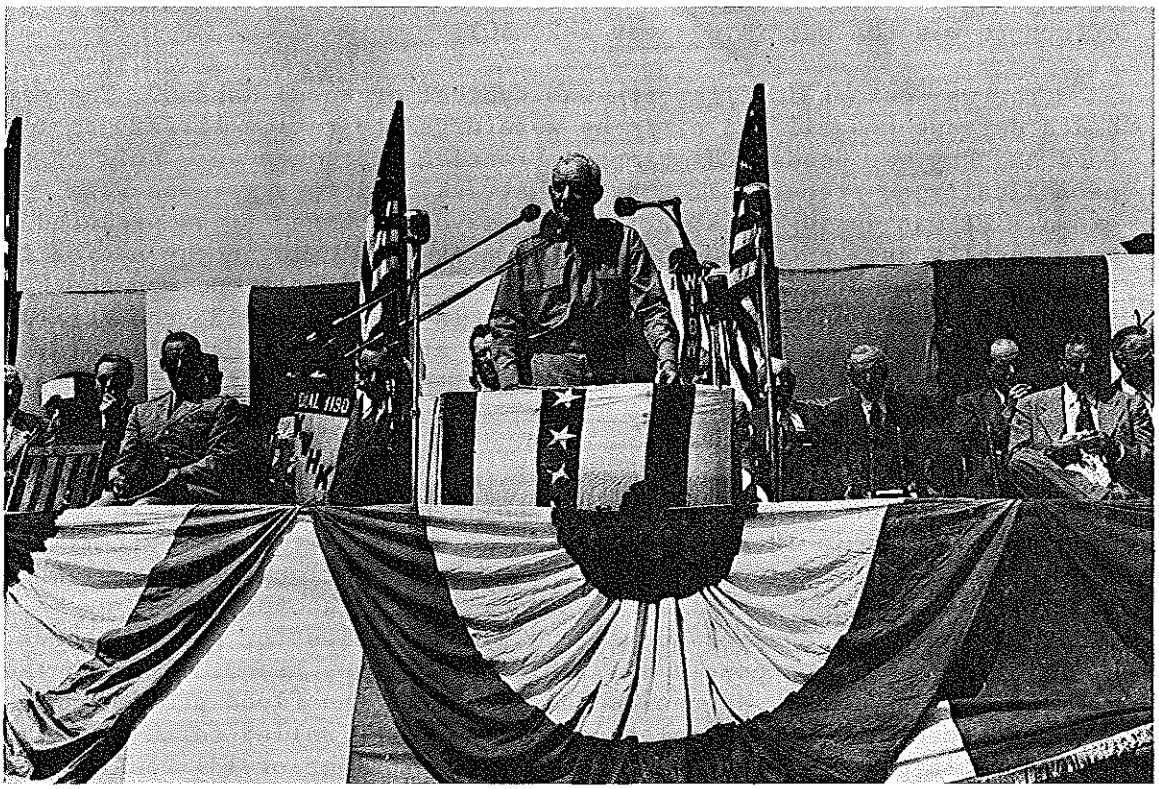

Figure 9. Dedication of Kanopolis Dam and Reservoir, May 31, 1948 (Courtesy of Kansas State Historical Society).

1950-1981 for Ellsworth County. In 1950, the county had 120,000 acres in winter wheat; 5000 in corn; 4000 in oats; 28,000 in sorghum; and 4000 in alfalfa; and other crops for a total value of all crops at $4.3 million. Livestock in 1950 broke out: horses, 1400; cattle, 36,000; sheep, 2000; swine, 3000; chickens 135,000; for a total value for all livestock at $4.3 million (Annual Report 37). In 1960, crops: 110,000 acres in wheat; 2000 in corn; 34,000 in sorghum; 6000 in alfalfa; and other crops totalling $5.7 million in value for all crops. Livestock: 600 horses; 42,000 cattle; 1800 sheep, 2500 hogs, 77,000 chickens, for a total value of all livestock at $5.1 million (Annual Report 44). In 1972: wheat, 100,000 acres; corn, 500 acres; sorghum, 21,000 acres; and all other crops totalling $8.3 million. Livestock: 55,000 cattle; 7500 swine; 600 sheep; 18,000 chickens, for a total value of $8.3 million (Kansas Farm Facts 1972). In 1981: wheat 125,000 acres; corn, 200; sorghum, 19,000; and all others totalling $16 million in value. Livestock: 38,000 cattle; 6000 swine; 600 sheep; for a combined value with poultry of $9.3 million (Kansas Farm Facts 1981). It is remarkable that through this thirty year period, the county kept a reasonably equal farm value between crops and livestock (Table 1).

World War II had created a new demand for farm products. Prices subsequently increased and were forty-one percent above the highest year of World War I. But instead of a farm recession like the one that followed the First World War, the program of European economic assistance embodied in the Marshall Plan boosted Kansas agrictultural production and prices even higher. The Korean War kept prices high. By 1940, over sixty-four percent of the cash receipts of Kansas agricultural producers came from the marketing of livestock and its products - the very thing that gave Ellsworth its start (Zornow 1957). The hog industry had been dealt a severe blow by the Depression, World War II and the government programs of the 1930s. After 1940, there was a temporary decline in the importance of livestock compared to crops. However, beef cattle in 1960 continued to account for 36 percent of the cash receipts for Kansas' farm commodities, or about equal to wheat. By 1970, beef cattle accounted for nearly fifty percent, while wheat went to twenty-two percent (Wood 1980).

The 1950s and 1960s saw a number of changes in Ellsworth. In 1952, the Veteran's Memorial Hospital was built. In July, 1953, a television station aired in Hutchinson and television aerials sprouted up around the county. Also, in 1953, Ellsworth city voted bonds for a new National Guard Armory. The following year saw a new grade school open in Kanopolis. In 1955, two famous personalities visited Ellsworth: television star Hopalong Cassidy made a personal appearance and Princess Ileana of Romania came to the Saint Francis Boy's Home for a Visit. In 1967, a new post office was dedicated and that year the county celebrated its Centennial. Wilson was also proclaimed the Czech capital of the world that year, as the city celebrated its second annual Czech Festival in July. In August, 1969, a major satellite of the Ford Motor Company opened its doors in Ellsworth in the Ell-Kan Company (Ellsworth Reporter 7-3-75). At first, the company employed 150 which had grown to 450 by 1976. The company produced wire harnesses for Ford cars and trucks. Ell-Kan Housing, Inc., sprang up to meet the housing needs created by the new plant (Kansas 1976).

The 1970s saw further progress and changes in the area. An early setback saw the Westerhaus Motor Company destroyed by one of the worst fires in the city of Ellsworth's history in 1971. That same year the Parkton Lawn Mower plant started operation and was later taken over by Ell-Kan, Inc. In 1972, Chickasha Mobile Homes, Inc., based in Chickasha, Oklahoma, selected Ellsworth as the site for a new mobile home manufacturing plant. Also in 1972, the Fort Harker Guardhouse was placed on the National Register of Historic Places (Ellsworth Reporter 7-3-75). In 1976, Cashco, Inc., a subsidiary of the Riley Company opened in Ellsworth employing 120. Within a year, Cashco had grown to 180 employees and had become a major cog in the local economy. Cashco specializes in pressure reducing valves and regulating valves. In 1976, Ellsworth County had 460 oil and gas wells producing 855,500 barrels of oil a year and 547 million cubic feet of gas. In 1976, retail sales approached $19 million (Kansas 1976).

Ellsworth County today is typical of many agriculturally based centers in Kansas and the Great Plains. While agriculture is still the primary vein along which its economy moves, it has diversified into fossil fuels, manufacturing, retail and recreation.

IDENTIFICATION OF AND SURVEY FOR POTENTIAL SITES

An important aspect of the Kanopolis Lake project has been the identification of and survey for "potential" historical archaeological sites on government land. Potential sites refer to those sites that have not been recorded archaeologically but whose existence is indicated by historical sources of one form or another. During the pre-field research, we attempted to identify as many of these potential sites as possible, but the efforts were limited by the need to be able to locate potential sites through field survey. For the present purposes, therefore, potential sites had to have specific locational information, and, as a result, the primary source for these sites was historical plats of Ellsworth County.

Plats which were of use in identifying potential archaeological sites covered a wide range of the historic period, and included plats prepared in 1875, 1887, 1901, and 1918 (Northwest Publishing Company 1901, L. G. Everts and Company 1887; K. C. Lithogr. Company 1875, Ogle 1918). These plats varied considerably in their detail, with the 1875 and 1887 plats providing only very limited information on the location of settlements. In general, the only settlements shown on these 19th century plats were major civic and governmental features such as post offices and schools. Much more reflective of the general settlement pattern, and thus much more useful in identifying potential archaeological sites, were the 1901 and 1918 plats. In addition to post offices and schools, these plats show a multitude of building locations, although these are rarely identified as to function. Most of the buildings shown on these plats appear to be private residences and farm/ranch buildings.

In order to provide for the field examination of these potential sites, their locations were transferred from the historical plats onto modern U.S.G.S. standard topographic quadrangles. The small scale of the 19th century plats provided vague locational information, usually only to the quarter-section. For the 20th century plats, which were of a much larger scale, the location of each building or cluster of buildings was measured in feet from the west and north edges of the section in which they were located. Using this information from the 19th and 20th century plats, each potential site was placed as precisely as possible on the appropriate topographic quadrangle.

A factor which must be kept in mind with this procedure is the factor of error. For the 19th century plats, which provide only vague locational information - usually only to the quarter section - the factor of error is potentially significant. In dealing with these sites, of which only 9 fell within the project area, this error was kept in mind and a substantial area was surveyed in their vicinities. In no case was an entire quarter-section examined in search for these sites, however; the focus was rather on the most favorable locations. For the 20th century plats, the factor of error was much less signifi- cant due to the larger scale of the historical plats. In general, potential site locations were transferred with an accuracy of one to two

hundred feet in either direction. This provided a very specific and limited area to survey in search of these potential sites.

Another source of error may exist, however, in the original preparation of the historical plats. Although we have no way to control for or verify the existence of this error, a comparison of the 1901 and 1918 plats does strongly suggest an inconsistent placement of sites. In numerous cases the same buildings clearly appear on both the 1901 and 1918 plats. In other cases, however, the 1901 and 1918 plats show buildings in approximately the same location, but not clearly representing the same building. In many cases, field research has suggested that two closely placed potential sites are probably the same site that was either placed incorrectly on either the 1901 or 1918 plat, or, perhaps, that appeared as separate sites due to the above mentioned error in the transfer of sites to topographic quadrangles.

Due to these problems with potential error and the comparability of the four plats used, it is impossible to determine precisely how many different sites are represented on these plats. Looking at the individual plats, we know that one is shown in 1875, ten in 1887, 57 in 1901, and 77 in 1918 (Tables 2 through 5). The question is, of course, how many of these represent sites that were in existence long enough to show on two or more plats? The answer to this must range between the largest number of sites shown on a single plat - which would be the 77 shown in 1918 - and the sum of all sites shown on all plats - which equals 143 - assuming no site appears on two plats.

If we control for the number of sites which we are fairly certain appear on more than one plat, we can arrive at a more reasonable maximum number of sites represented by the four plats examined. It is difficult to say if the sole site shown on the 1875 plat appears on later plats due to vague locational information and due to the appearance of sites in the vicinity of this site on both the 1901 and 1918 plats. The vague locational information provided on the 1887 plat also makes such conclusions difficult, but two (the Venango and Farisville post offices)

Table 2. Potential archaeological sites located within the Kanopolis project shown on the ca. 1875 Sectional Map of Ellsworth County (K.C. Lithogr. Co. 1875), and results of survey for these sites.

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
Post Office	Post Office	1460'	Not found; this potential site was located in an unsurveyable area.

*Site type description is based on information contained on the historical plat.

Table 3. Potential archaeological sites located within the Kanopolis project area shown on the 1887 Ellsworth County plat (L.G. Everts & Co. 1887:290), and results of the survey for these sites.

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
Old Fort Road	Road	Varies	Found. Designated as Zarah 14EW153. This is more properly known as the Denver Express Road or Smoky Hill Trail.
School District 18	School	1470'	Found. Designated as 14EW130. Site is located outside project area. Also shows on 1918 plat.
Venango Post Office	Post Office	1460'	Found. Designated as 14EW130. Site is located outside project area. Also shown on 1918 plat.
School District 8	School	Inundated	Not found. Site is below normal pool.
Farisville Post Office	Post Office	1480'	Found. Designated as 14EW103; this site was tested. Also shows on 1901 and 1918 plats.
School District 51	School Road	1480' Varies	Found? Probably site 14EW117. Found. Designated as 14EW104 and 14EW105.
School District 4	School	1505'	Not found. Site area is located in a cultivated field on a terrace.
School District 5	School	1550'	Found? Probably site 14EW134.

*Site type description is based on information contained on the historical plat.

Table 4. Potential archaeological sites located within the Kanopolis project area shown on the 1901 Ellsworth County plat (Northwest Publishing Company 1901), and results of survey for these sites.

CARNEIRO TOWNSHIP

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
Cyrus Smith	Unidentified Building	1510'	Not found. Site area is in pasture. Also shows on 1918 plat.

CLEAR CREEK TOWNSHIP

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
2 buildings and pond; D. H. Howard	Unidentified Building	1510'	Found? Probably 14EW119.
A.V.B. Polhemus et al.	Unidentified Building	1510'	Found. Designated as 14EW126. Also shows on 1918 plat.

EMPIRE TOWNSHIP

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
Silas B. Smith	Unidentified Building	1490'	Not found.
School Number 18. Lewis H. Lapham	Unidentified Building	1550'	Not found. Site area is in pasture.
D. H. Kreger	Unidentified Building	Inundated	Not found. Site is below normal pool.
Lewis H. Lapham	Unidentified Building	Inundated	Not found. Site is below normal pool.
School Number 8, The Trust Company.	School	Inundated	Not found. Site is below normal pool. Also shows on 1918 plat.
Lewis H. Lapham	Unidentified Building		
John S. Wilson	Unidentified Building	Inundated	Not found. Site is below normal pool. Also shows on 1918 plat.

(continued)

Table 4. Potential archaeological sites located within the Kanopolis project area shown on the 1901 Ellsworth County plat (Northwest Publishing Company 1901), and results of survey for these sites.

CARNEIRO TOWNSHIP

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
Cyrus Smith	Unidentified Building	1510'	Not found. Site area is in pasture. Also shows on 1918 plat.

CLEAR CREEK TOWNSHIP

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
2 buildings and pond; D. H. Howard	Unidentified Building	1510'	Found? Probably 14EW119.
A.V.B. Polhemus et al.	Unidentified Building	1510'	Found. Designated as 14EW126. Also shows on 1918 plat.

EMPIRE TOWNSHIP

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
Silas B. Smith	Unidentified Building	1490'	Not found.
School Number 18. Lewis H. Lapham	Unidentified Building	1550'	Not found. Site area is in pasture.
D. H. Kreger	Unidentified Building	Inundated	Not found. Site is below normal pool.
Lewis H. Lapham	Unidentified Building	Inundated	Not found. Site is below normal pool.
School Number 8, The Trust Company.	School	Inundated	Not found. Site is below normal pool. Also shows on 1918 plat.
Lewis H. Lapham	Unidentified Building		
John S. Wilson	Unidentified Building	Inundated	Not found. Site is below normal pool. Also shows on 1918 plat.

(continued)

Table 4 continued. Potential archaeological sites located within the Kanopolis project area shown on the 1901 Ellsworth County plat (Northwest Publishing Company 1901), and results of survey for these sites.

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
Lewis H. Lapham	Unidentified Building	Inundated	Not found. Site is below normal pool.
Eden Park Horse and Cattle Company	Unidentified Building	Inundated	Not found. Site is below normal pool. Also shows on 1918 plat.
Eden Park Horse and Cattle Company	Unidentified Building		Not found. Site is below dam.
F. W. Merrywether	Unidentified Building	Inundated	Not found. Site is below normal pool. Also shows on 1918 plat.
Teresa M. Frankford	Unidentified Building	Inundated	Not found. Site is below normal pool.
Frank A. Bates	Unidentified Building	1505'	Not found.
Alex Lawson	Unidentified Building	1480'	Not found. Site area is in cultivated field.
Frank A. Bates	Unidentified Building	1480'	Not found. Site area is in cultivated field.
John Shoden	Unidentified Building	1485'	Not found. Site area is in cultivated field. Also shows on 1918 plat.
Cliff Stock Farm	Unidentified Building	1500'	Found. Designated 14EW7. This site was tested archaeologically. Also shows on 1918 plat.
Charles Carlson	Unidentified Building	1520'	Found. Probably 14EW114. Also shows on 1918 plat.
Royal Harkness	Unidentified Building	1530'	Found? Probably 14EW115. Also shows on 1918 plat.
S. J. Gilmore	Unidentified Building	1500'	Not found. Site area is in a cultivated field.

(continued)

Table 4 continued. Potential archaeological sites located within the Kanopolis project area shown on the 1901 Ellsworth County plat (Northwest Publishing Company 1901), and results for these sites.

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
P. M. Grubb	Unidentified Building	1505'	Not found. Site area is pasture.
W. B. Essick	Unidentified Building	1500'	Found. Designated 14EW111.
W. B. Essick	Unidentified Building	1500'	Not found. Also shows on 1918 plat.
Abraham Essick	Unidentified Building	1500'	Not found. Also shows on 1918 plat.
Fornberg	Unidentified Building	1510'	Found. Designated 14EW116.
Elias M. Straley	Unidentified Building	1490'	Found. Designated 14EW147. Also shows on 1918 plat.
A. K. Shade	Unidentified Building	1520'	Not found. Site area is in pasture. Also shows on 1918 plat.
Farisville Post Office William F. Doan	Post Office	1480'	Found. Designated 14EW103. Also shows on 1887 and 1918 plats.
Joseph W. Huggins	Unidentified Building	1485'	Found. Probably 14EW148.
A. B. Stamps	Unidentified Building	1480'	Found. Designated 14EW149. Also shows on 1918 plat.
James H. Robbins	Unidentified Building	1470'	Not found. Also shows on 1918 plat.
John Radcliff	Unidentified Building	1480'	Found. Probably 14EW117. Also shows on 1918 plat.
John J. Radcliff	Unidentified Building	1470'	Found. Site area is in cultivated field. Also shows on 1918 plat.
M. Naven	Unidentified Building	1460'	Not found. Site area is in cultivated field.

(continued)

Table 4 continued. Potential archaeological sites located within the Kanopolis project shown on the 1901 Ellsworth County plat (Northwest Publishing Company 1901), and results of survey for these sites.

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
W. H. Hettick	Unidentified Building	1460'	Not found. Site area is in an unsurveyable area. Also shows on 1918 plat.
E. Becker	Unidentified Building	1530'	Found. Designated 14EW125. Also shows on 1918 plat.
S. A. Campbell	Unidentified Building	1510'	Found. Designated 14EW125. Also shows on 1918 plat.
John Butler	Unidentified Building	1490'	Not found.
L. H. Lapham	Unidentified Building	1550'	Not found.
John and John F. Butler	Unidentified Building	1460'	Found. Designated 14EW137. Also shows on 1918 plat.
Residence of Joseph W. Huggins	Farm/Ranch Settlement	Inundated	Not found. Site is below normal pool.
J. F. Kenyon	Unidentified Building	Inundated	Found. Designated 14EW123.
Fred Baker	Unidentified Building	1500'	Not found. Site area is in pasture.
John D. Grubb	Unidentified Building	1505'	Found. Designated 14EW109. Also shows on 1918 plat.

LANGLEY TOWNSHIP

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
William Kindt	Unidentified Building	1430	Found? Probably 14EW143.
T. R. Tolksdorff	Unidentified Building	1420'	Found. Designated Also on 1918 plat.

(continued)

Table 4 continued. Potential archaeological sites located within the Kanopolis project area shown on the 1901 Ellsworth County plat (Northwest Publishing Company 1901), and results of survey for these sites.

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
Nelson G. Lawson	Unidentified Building	1420'	Found. Designated 14EW142. Also shows on 1918 plat.
Wm. P. Kindt	Unidentified Building	1530	Not Found.
Peter Yungren	Unidentified Building	1430'	Found. Designated as 14EW144.
John L. Mason	Unidentified Building	1520'	Found. Designated 14EW136. Also shows on 1918 plat.
School Number 5, Charles A. Williams	School	1510'	Not found. Site area is in a cultivated field. Also shows on 1918 plat.
School Number 15, N. G. Lawson	School	1450'	Found. Designated 14EW131.

*Site type description is based on information contained on the historical plat.

Table 5. Potential archaeological sites located within the Kanopolis project area shown on the 1918 plat of Ellsworth County (Ogle 1918), and results of survey for these sites.

CARNEIRO TOWNSHIP

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
Elmdale Guernsey Farm O. B. Smith	Unidentified Building	1520'	Found. Designated 14EW128.
Alex Lawson	Unidentified Building	1510'	Not found. Site area is in pasture. Also shows on 1901 plat.

(continued)

Table 5 continued. Potential archaeological sites located within the Kanopolis project area shown on the 1918 plat of Ellsworth County (Ogle 1918), and results of survey for these sites.

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
CLEAR CREEK TOWNSHIP			
Lakeside Farm D. H. Howard	Unidentified Building	1510'	Found. Probably 14EW119.
Grove Farm J. L. Sternberg	Unidentified Building	1505'	Found. Designated 14EW126. Also shows on 1901 plat.
EMPIRE TOWNSHIP			
F. B. Gordenier	Unidentified Building	Inundated	Not found. Site is below normal pool. Also shows on 1901 plat.
Shady Bend Division, Lewis H. Lapham	Unidentified Building	Inundated	Not found. Site is below normal pool.
Dewitt H. Curtis	Unidentified Building	1450'	Found. Designated 14EW130. Located outside project area. Shows as Venango P. O. on 1887 plat.
School R. L. Caldwell	School	Inundated	Not found. Site is below normal pool. Also shows on 1901 plat.
Residence of C. A. Campbell Riverside Division Lewis H. Lapham	Farm/Ranch	Inundated	Not found. Site is below normal pool.
Midland Division Lewis H. Lapham	Unidentified Building	Inundated	Not found. Site is below normal pool.
Midland Division Lewis H. Lapham	Unidentified Building	1460'	Found. Probably 14EW129.

(continued)

Table 5 continued. Potential archaeological sites located within the Kanopolis project area shown on the 1918 plat of Ellsworth County (Ogle 1918), and results of survey for these sites.

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
Smoky Hill Ranch, Olaf Larson	Unidentified Building	Inundated	Not found. Site is below normal pool. Also shows on 1901 plat.
Lewis H. Lapham	Unidentified Building	Inundated	Not found. Site is below normal pool.
F. A. Merrywether	Unidentified Building	Inundated	Not found. Site is below normal pool. Also shows on 1901 plat.
Caldwell Ranch R. L. Caldwell	Unidentified Building	Inundated	Not found. Site is below normal pool. Also shows on 1901 plat.
Caldwell Ranch R. L. Caldwell	Unidentified Building	Inundated	Not found. Site is below normal pool.
Residence of J. C. Cadwell	Unidentified Building		Not found. Site is under dam.
Residence of Russel Bates, White Bluff Ranch Frank Bates	Farm/Ranch Settlement	1550'	Found. Designated 14EW127.
John Shoden	Unidentified Building	1485'	Not found. Site area is in cultivated field. Also shows on 1901 plat.
Smoky Hill Stock Farm C. H. Howard	Unidentified Building	1490'	Found. Designated 14EW146.
Cliff Spring Spring Farm, Winfield S. Faris	Unidentified Building	1500'	Found. Designated 14EW7. Also shows on 1901 plat.
Side View Farm F. L. Arn	Unidentified Building	1520'	Found. Designated 14EW121.
Charles Carlson	Unidentified Building	1520'	Found. Designated 14EW115.

(continued)

Table 5 continued. Potential archaeological sites located within the Kanopolis project area shown on the 1918 plat of Ellsworth County (Ogle 1918), and results of survey for these sites.

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
W. H. H. and W. S. Faris	Unidentified Building	1520'	Found. Probably 14EW114. Also shows on 1901 plat.
Sunny Slope Farm	Unidentified Building	1540'	Not found.
P. M. Grubbs	Unidentified Building	1500'	Found. Designated 14EW112.
H. A. Kunkle	Unidentified Building	1490'	Not found.
Bridge across Smoky Hill River	Bridge		Replaced with a modern concrete bridge.
A. Jennings	Unidentified Building	1500'	Not found. Site area is in cultivated field. Also shows on 1901 plat.
Missouri Pacific Railroad bridge across Smoky Hill River	Bridge		Found. Designated 14EW110.
A. Essick	Unidentified Building	1500'	Not found. Also shows on 1901 plat.
J. G. Bircher	Unidentified Building	1530'	Found. Designated 14EW120.
Ed Powell	Unidentified Building	1490'	Not found. Site area is on a cultivated terrace.
Elias M. Straley	Unidentified Building	1490'	Found. Designated 14EW147. Also shows on 1901 plat.
W. F. Doan also on 1887 and 1901 plats as Farisville Post Office	Unidentified Building	1480'	Found. Designated 14EW103.

(continued)

Table 5 continued. Potential archaeological sites located within the Kanopolis project area shown on the 1918 plat of Ellsworth County (Ogle 1918), and results of survey for these sites.

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
Ford across Smoky Hill River	Ford		Not found.
Cedar Lawn Farm, N. A. Huggins	Unidentified Building	1480'	Found? Probably 14EW148.
W. W. Huggins	Unidentified Building	1470'	Not found.
Ford across Smoky Hill River	Ford		Not found.
Residence of J. F. Stamps, Shady Glen Stock Farm, A. R. Stamps	Farm/Ranch Settlement	1480'	Found. Designated 14EW149. Also shows on 1901 plat.
Eva Robbins	Unidentified Building	1470'	Not found. Also shows on 1901 plat.
M. Hickman	Unidentified Building	1480'	Found? Probably 14EW117. Also shown on 1901 plat.
M. Hickman	Unidentified Building	1470'	Found? Probably 14EW117. Also shows on 1901 plat.
W. H. Hettrick	Unidentified Building	1460'	Not found. Site is in an unsurveyable area.
Spring Valley Stock Farm, John R. Black	Unidentified Building	1500'	Found. Designated as 14EW138.
Bridge across Smoky Hill River	Bridge		Not found.
B.P. and H.B. Becker	Unidentified Building	1530'	Found. Desingated 14EW125. Also shows on 1901 plat.
Residence of M. Hodgden Happy Hollow Farm, Henry Hodgden	Farm/Ranch Settlement	1510'	Found. Designated 14EW122. Also shown on 1901 plat.

(continued)

Table 5 continued. Potential archaeological sites located within the Kanopolis project area shown on the 1918 plat of Ellsworth County (Ogle 1918), and results of survey for these sites.

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
Happy Hollow Farm, Henry Hodgden	Unidentified Building	1530'	Not found.
Happy Hollow Farm, Henry Hodgden	Unidentified Building	1550'	Not found.
Happy Hollow Farm, Henry Hodgden	Unidentified Building	1550'	Not found. Also shows on 1901 plat.
Blue Valley Farm, Emil Cipra.	Unidentified Building	1530'	Not found.
Residence of R.F. Vague, Horse Shoe Bend Stock Farm, Jos. Peppiatt and R. Vague Est.	Farm/Ranch Settlement	1460'	Found. Designated 14EW137. Also shows on 1901 plat.
Horse Shoe Bend Stock Farm, Jos. Peppiatt and R. Vague Est.	Unidentified Building	1530'	Not found. Site area is in pasture.
Horse Shoe Bend Stock Farm, Jos. Peppiatt and R. Vague Est.	Unidentified Building	1520'	Not found.
Ford across Smoky Hill River.	Ford		Not found. Site is below normal pool.
A. Kunkle	Unidentified Building	1500'	Not found. Site area is in pasture.
C. S. Bath	Unidentified Building	1570'	Found. Designated 14EW124.

(continued)

Table 5 continued. Potential archaeological sites located within the Kanopolis project area shown on the 1918 plat of Ellsworth County (Ogle 1918), and results of survey for these sites.

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
M. Hickman		1480'	Found? Probably 14EW117. Also shows on 1901 plat.
M. Hickman		1470'	Found? Probably 14EW117. Also shows on 1901 plat.
W. H. Hettrick		1460'	Not found. Site is in an unsurveyable area.
Spring Valley Stock Farm John R. Black		1500'	Found. Designated 14EW138.
Bridge across Smoky Hill River			Not found.
B. P. and H. B. Becker		1530'	Found. Designated 14EW125. Also shows on 1901 plat.
Residence of M. Hodgden, Happy Hollow Farm, Henry Hodgden.		1510'	Found. Designated 14EW122. Also shown on 1901 plat.
Happy Hollow Farm, Henry Hodgden		1530'	Not found.
Happy Hollow Farm, Henry Hodgden		1550'	Not found.
Happy Hollow Farm, Henry Hodgden		1550'	Not found.
Blue Valley Farm, Emil Cipra		1530'	Not found.
Residence of R. F. Vague, Horse Shoe Bend Stock Farm, Joseph Peppiatt and R. Vague Est.		1460'	Found. Designated 14EW137. Also shows on 1901 plat.

(continued)

Table 5 continued. Potential archaeological sites located within the Kanopolis project area shown on the 1918 plat of Ellsworth County (Ogle 1918), and results of survey for these sites.

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
Horse Shoe Bend Stock Farm, Joseph Peppiatt and R. Vague Est.		1530'	Not found. Site area is in pasture
Horse Shoe Bend Stock Farm, Joseph Peppiatt and R. Vague Est.		1520'	Not found.
Horse Shoe Bend Stock Farm, Joseph Peppiatt and R. Vague Est.		1520'	Not found.
Ford across Smoky Hill River			Not found. Site is below normal pool.
A. Kunkle		1500'	Not found. Site area is in pasture.
C. S. Bath		1570'	Found. Designated 14EW124

ASH CREEK TOWNSHIP

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
M. G. Campbell	Unidentified Building	1510'	Not found.
A. Kipp	Unidentified Building	1505'	Found. Designated 14EW109. Also shows on 1901 plat.
Frank Soukup Est.	Unidentified Building	1510'	Not found.
E. Lang	Unidentified Building	1510'	Found. Designated 14EW107.

LANGLEY TOWNSHIP

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
T. R. Tolksdarff	Unidentified Building	1420'	Found. Probably 14EW140 Also on 1901 plat.

(continued)

Table 5 continued. Potential archaeological sites located within the Kanopolis project area shown on the 1918 plat of Ellsworth County (Ogle 1918), and results of survey for these sites.

DESCRIPTION	SITE TYPE	ELEVATION	RESULTS
Swan E. Krig	Unidentified Building	1430'	Found. Designated 14EW142. Also shows on 1901 plat.
Wm. A. Kindt Estate	Unidentified Building	1430'	Found. Designated 14EW143.
Residence of Oscar Youngren, Hillside Stock Farm, Peter Youngren	Farm/Ranch Settlement	1430'	Found. Designated 14EW144. Also shows on 1901 plat.
F. A. Merrywether Estate	Unidentified Building	1490'	Not found.
Residence of H. A. and Elvin Larson Smoky Hill Ranch Olaf Larson	Farm/Ranch Settlement	1470'	Found. Designated This site was tested archaeologically.
W. G. Bircher	Unidentified Building	1520'	Found. Probably 14EW136. Also shows on 1901 plat.
A. S. Chase (Trustee)	Unidentified Building	1490'	Found? Probably 14EW134. Also shows on 1901 plat.
School, A.S. Chase (Trustee)	School	1510'	Not found. Also shows on 1901 plat.
Residence of McInnes Ranch, Robert McInnes	Farm/Ranch	1480'	Found. Designated 14EW133.
School	School	1450'	Found. Designated 14EW131. Also shows on 1901 plat.
H. M. Hughes	Unidentified Building	1470'	Found. Designated 14EW132.

*Site type description is based on information contained on the historical plat.

of the ten sites shown are clearly duplicated on either or both of the 1901 and 1918 plats. With greater locational accuracy at our disposal, we can say of the 1901 plat that 28 sites also show up on the later 1918 plat. One of these sites, the Farisville post office, was also shown on the 1887 plat. If we add the 77 sites shown in 1918 to the number of sites shown on the 1875, 1887, and 1901 plats, but which do not also occur on the 1918 plat we obtain a maximum number of potential sites of 114.

Of these 114 potential sites, 20 are located below the multipurpose of Kanopolis Lake or beneath the dam structure. The remaining 94 are located above the normal pool on government land, and were examined during this project. Visits to these 94 potential archaeological sites resulted in the recordation of 42 new archaeological sites. In addition, one previously recorded site, 14EW7, was correlated with one of the potential sites, making for a total recovery of 43 out of 94 potential sites. Further, during the course of the survey of these potential sites, eleven additional sites were inventoried. These include two prehistoric sites and six historic sites discovered through fortuitous encounter, and three historic sites discovered through the examination of particularly favorable site locations in the vicinity of other survey work. A total of 53 newly inventoried archaeological sites were therefore recorded for Ellsworth County as a result of this project (Figure 10).

Description of Inventoried Sites

A description of these newly inventoried archaeological sites is appropriate at this point. The following description includes both those sites which were identified as potential prior to our survey (indicated by a (P) after the site number), sites for which discovery during this project was unexpected (indicated by (*) after the site number), and sites that were recorded prior to our survey but which were subject to further evaluations at this time (indicated by a (R) after the site number) (Table 6).

14EW7: Faris Caves (R)

This site is well known locally as the Faris Caves. It is located within and at the base of a Dakota sandstone bluff along the left bank of the Smoky Hill River. It was recorded during a 1976 archaeological survey of Lake Kanopolis because it is also the location of several panels of aboriginal rock art (Leaf 1977). Although not a potential site because of this prior recordation, this site correlates with sites shown on both the 1901 and 1918 plats of Ellsworth County. The 1901 plat identifies the land on which this site is located as part of the "Cliff Stock Farm", while the 1918 plat identifies it as part of the "Cliff Spring Farm", owned by Winfield S. Faris. This site is one of seven to be evaluated archaeologcially for its National Register significance during this project, and is discussed in greater detail elsewhere in this report.

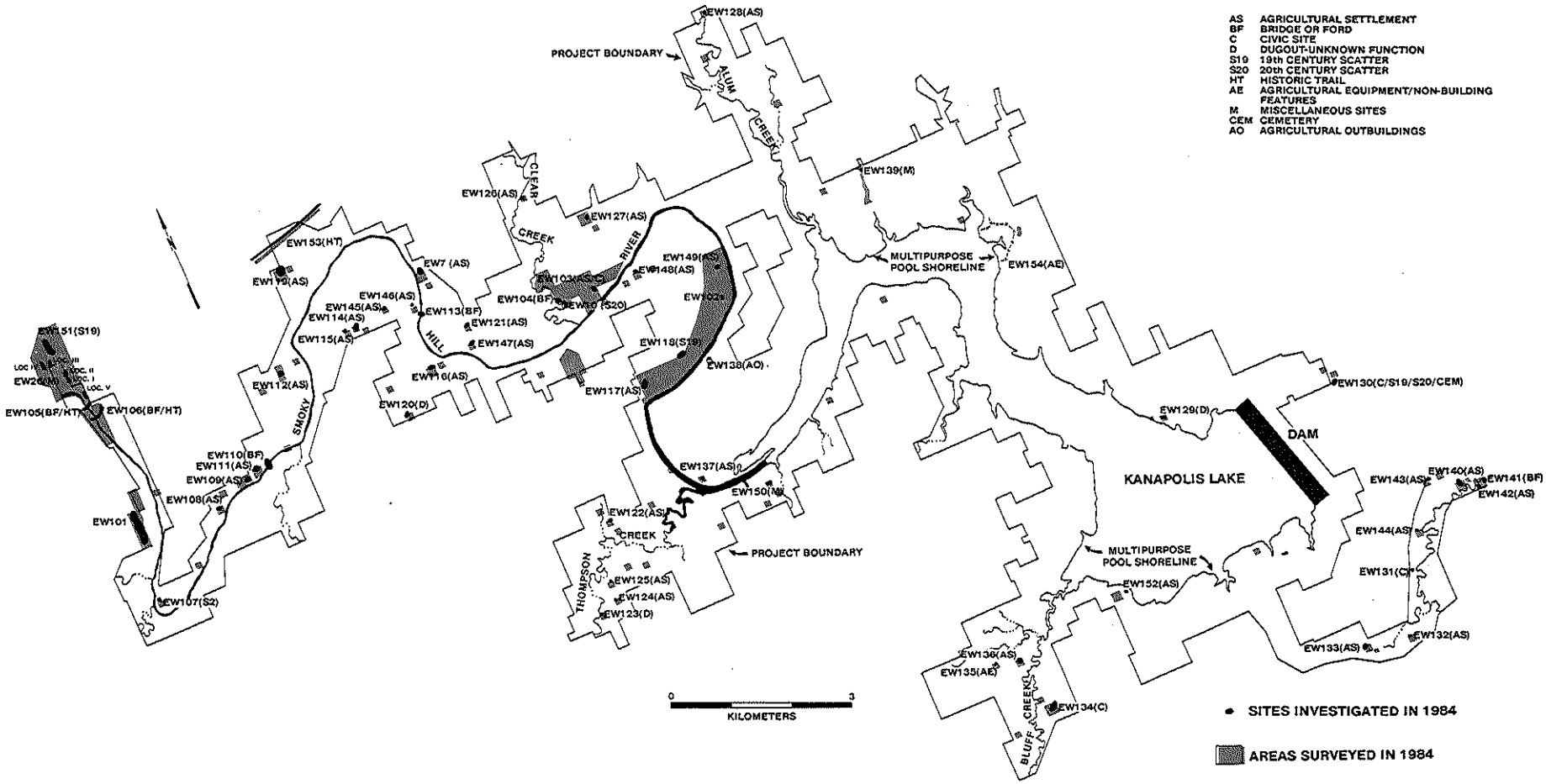

Figure 10. Location of sites inventoried and tested at Kanopolis Lake.

Table 6. Summary of cultural resources inventoried during this project

Site No.	Type**	Description	Plat Reference	Collection
14EW7	R-Tested	Faris Caves. 19th & 20th century agricultural settlement with standing agriculture.	1901,1918	Yes
14EW10	R	20th century scatter.	None	No
14EW26	R-Tested	Fort Ellsworth. Dugouts and 19th century scatters. Also prehistoric component(s).	None	Yes
14EW101	*	Prehistoric ceramic & lithic scatter.	None	Yes
14EW102	*	Prehistoric lithic scatter.	None	Yes
14EW103	P-Tested	Farisville Post Office 19th & 20th century 1918 agricultural settlement.	1887, 1901,	Yes
14EW104	*	Single span iron pony truss (Pratt) highway bridge.	None	No
14EW10	P-Evaluated	Smoky Hill Bridge and Ft. Zarah/Santa Fe Road (19th century).	1887	No
14EW106	P-Evaluated	Smoky Hill Ford and Fort Zarah/Santa Fe Road (19th Century)	1887	No
14EW10	P	20th century scatter.	1918	No
14EW108	*	Agricultural settlement.	None	No
14EW109	P	Agricultural settlement.	1901, 1918	No
14EW110	P	Multiple truss (pony deck) plate girder railroad bridge.	1918	No
14EW111	P	Agricultural settlement.	1901	No

(continued)

Table 6 continued. Summary of cultural resources inventoried during this project

Site No.	Type**	Description	Plat Reference	Collection
14EW112	P	Agricultural settlement.	1918	No
14EW113	P	Multiple iron truss (Pratt) highway bridge.	None	No
14EW114	P	Agricultural settlement.	1901, 1918	No
14EW115	P	Agricultural settlement.	1901, 1918	No
14EW116	P	Agricultural settlement.	1901, 1918	No
14EW117	P	Agricultural settlement.	1901, 1918	No
14EW118	*	19th century scatter.	None	Yes
14EW119	P-Tested	Black Ranch. 19th & 20th century agricultural settlement.	1901, 1918	Yes
14EW120	P	Dugouts.	1918	No
14EW121	P	Agricultural settlement.	1918	No
14EW122	P	Agricultural settlement.	1901, 1918	No
14EW123	P	Dugout.	1901	No
14EW124	P	Agricultural settlement.	1918	No
14EW125	P	Agricultural settlement.	1901, 1918	No
14EW126	P	Agricultural settlement.	1901, 1918	No
14EW127	P	Agricultural settlement.	1918	No
14EW128	P	Agricultural settlement.	1918	No
14EW129	P	Dugouts.	1901, 1918	Yes
14EW130	P	Vanango Post Office. 19th & 20th century scatter.	1887, 1918	Yes
14EW131	P	School. Standing 19th century architecture	1901, 1918	No
14EW132	P	Agricultural settlement.	1918	No

(continued)

Table 6 continued. Summary of cultural resources inventoried during this project

Site No.	Type**	Description	Plat Reference	Collection
14EW133	P	Agricultural settlement.	1918	No
14EW134	P	School?	1887	No
14EW135	*	Isolated find, Hay stacker.	None	No
14EW136	P	Agricultural settlement.	1901, 1918	No
14EW137	P	Agricultural settlement.	1901, 1918	No
14EW138	P	Agricultural outbuildings.	1918	No
14EW139	R-Tested	Cave shelters.	None	No
14EW140	P	Agricultural settlement.	1901, 1918	No
14EW141	*	Iron highway bridge, destroyed.	None	No
14EW142	P	Agricultural settlement.	1901, 1918	No
14EW143	P	Agricultural settlement.	1901, 1918	No
14EW144	P	Agricultural settlement.	1901, 1918	No
14EW145	*	Agricultural settlement.	None	No
14EW146	P	Agricultural settlement.	1918	No
14EW147	P	Agricultural settlement.	1901, 1918	No
14EW148	P	Agricultural settlement.	1901, 1918	No
14EW149	P	Agricultural settlement.	1901, 1918	No
14EW150	*	Building foundation.	None	No
14EW151	*	19th century scatter.	None	No
14EW152	P	Millett Ranch. 20th century agricultural settlement.	1918	Yes
14EW153	P	Smoky Hill Trail/Denver Express Road (19th century).	1887	No

(continued)

Table 6 continued. Summary of cultural resources inventoried during this project

Site No.	Type**	Description	Plat Reference	Collection
14EW154	P	Rock "corrals" or fences.	None	No

** P Potential Site
 * Fortuitous Discovery
 R Previously Recorded Site

14EW10 (R)

Site 14EW10 was recorded prior to this survey as the site of a prehistoric settlement. It is located on a low ridge on the left bank of Clear Creek a short distance above its confluence with the Smoky Hill River. During this survey, it was examined in association with the search for a nearby potential site because it was felt to represent a favorable site for historic period settlement. The result was the fortuitous discovery of a scatter of historic artifacts over an area of about 5000 square meters. The entire area of this site is located in a cultivated field. The absence of this site on any of the historic plats examined during this project suggests that it dates after the date of the last plat, or after 1918.

14EW26: Fort Ellsworth (R)

The site of Fort Ellsworth, 14EW26, was visited by Carlyle Smith of the University of Kansas during his archaeological work at Kanopolis Lake in 1948. While not discussed in his 1949 report, Smith (1949) made a surface collection at this site which is curated at the Kansas University Museum of Anthropology. This site is located in the vicinity of the confluence of Spring Creek and the Smoky Hill River, on the left bank of the Smoky Hill and on both sides of Spring Creek. This site is well known locally, and is complex archaeologically. It was one of seven to be tested archaeologically to provide information for a determination of its National Register eligibility, and is discussed in greater detail elsewhere in this report.

14EW101 (*)

This site consists of an extensive scatter of prehistoric lithics and ceramics on the right bank of the Smoky Hill River just north of its confluence with Mud Creek. Since this site does not pertain to the historic period, it will not be discussed further in this report.

14EW102 (*)

This site consists of a low-density, prehistoric lithic scatter located on the right bank of the Smoky Hill River on an extensive terrace bounded on three sides by the Smoky Hill. Since this site does not pertain to the historic period, it will not be discussed further in this report.

14EW103: Farisville Post Office (P)

This site consists of the remains of the Farisville Post Office, shown on the 1887, 1901, and 1918 plats of Ellsworth County. The 1901 and 1918 plat books of Ellsworth County indicate that the land on which the Farisville Post Office was located was owned by William F. Doan, who was listed in 1901 as a farmer, stock raiser, and postmaster. It is located on the left bank of the Smoky Hill River on the edge of what is provisionally identified as the second terrace. In his 1947 report on the historical aspects of Kanopolis Reservoir, Mattes (1947:2) dates this post office to about 1876, and states thast it was "destroyed by fire recently". Well preserved remains of this site were discovered. This site was one of seven to be tested archaeologically during this project, and is discussed in greater detail elsewhere in this report.

14EW104(*)

Site 14EW104 consists of a single span, iron pony truss (Pratt) highway bridge which spans Clear Creek about one-half mile from its confluence with the Smoky Hill River (Comp and Jackson 1977). This bridge is in active use along an unpaved section line road, and probably dates from the early 20th century.

14EW105: Government Bridge Across Smoky Hill River (P)

14EW105 is the site of a government bridge across the Smoky Hill River on the Fort Zarah or Santa Fe Road. According to Mattes (1947) this bridge was built about 1855 and was used until about 1858 when it was destroyed by a flood. Well preserved remains of this bridge were observed at this site, and included earthen approach ramps/abutments on both sides of the Smoky Hill River and wooden bridge pilings in the river bed. A well preserved section of the Fort Zarah/Santa Fe Road was also observed leading to this bridge. This site was one of eleven to be evaluated for National Register significance as a result of this project, and is discussed in greater detail elsewhere in this report.

14EW106: Smoky Hill Ford (P)

14EW106 is the site of the Smoky Hill ford on the Fort Zarah or Santa Fe Road which Mattes (1947) says came into use following the destruction of the government bridge (14EW105) in 1858. Like the bridge, which is located immediately upstream, this ford was on the Fort Zarah or Santa Fe Road. Possibly due to heavy sedimentation along this portion of the Smoky Hill River during the recent past (see Discussion of Testing at site 14EW7), no evidence of a ford could be observed along the banks of this stream. The probable approach to this ford is visible on the left bank of the Smoky Hill River, and a portion of the road may be visible on the right side as it cuts through a terrace edge. This ford is one of eleven sites to be evaluated for National Register significance as a result of this project, and is discussed in greater detail elsewhere in this report.

14EW107 (P)

This site consists of a moderate density scatter of historic artifacts in a cultivated field on the left bank of the Smoky Hill River. It is situated on the edge of a sandy terrace, and is just north of a series of stable dune features. The Smoky Hill makes a hairpin

turn at this location, with 14EW107 located at the tip of a one-mile long peninsula of terrace deposits on the inside of the hairpin. 14EW107 was a potential site; its discovery was facilitated through its appeareance on the 1918 plat of Ellsworth County. Ownership of the site area was listed as "E. Lang" on the 1918 plat.

Artifacts at this site were found within a roughly circular area covering approximately 3750 square m (Table 7). In addition, a dense deposit of water transported historic artifacts, primarily bottle fragments, dating from the late 19th or early 20th century, was observed in sand and gravel bars in the Smoky Hill River at this site. The origin of these artifacts is unknown, but it is unlikely that they are associated with 14EW107.

Table 7. Artifacts collected on the surface of 14EW107

Catalog Number	Frequency	Description
1	5	Window glass.
2	1	Amethyst bottle base, ring seam (automatic bottle machine).
3	1	White glazed stoneware.
4	1	Embossed whiteware.
5	1	Stoneware crockery, buff glazeo on a buff paste.
6	1	Four-hole shell button.
7	1	Coal clinkers.
	1	Clear glass continuous thread jar finish, automatic bottle machine.
	4	Amethyst bottle fragments.
	1	Opal glass jar lid liner fragment.
	2	Aqua bottle glass fragments.

Artifacts collected and observed at this site included a coal clinker, shell button, ceramics, bottle glass, and window glass. In general, these types of artifacts suggest that 14EW107 was a domestic/residential site, although the artifacts are far from conclusive on this interpretation. The bottle glass contains some fairly age-diagnostic fragments. Among these is an amethyst bottle base with a ring seam. The amethyst color of this bottle glass indicates that it contains manganese, which turns amethyst when exposed to ultra violet radiation (sunlight), and which was used as a clearing agent in glass between about 1885 and the onset of World War I (Munsey 1970). The ring seam indicates that this bottle was manufactured using an automatic bottle machine, which became common in about 1920 (Newman 1970). The presence of these two characteristics on the same artifact tends to provide a tight date, probably between the 1910 to 1920 period. In addition to this artifact, four fragments of amethyst bottle glass were collected from this site, and which can be dated to the 1885 to 1915

period. In general, the dates provided from this bottle glass is consistent with documents which indicate a building at this location in 1918.

14EW108(*)

This site was discovered through a fortuitous encounter while searching for a potential site. It is probably relatively recent in age - its failure to appear on any of the plats examined suggests that it probably dates after the last of these plats, dated 1918, was prepared. 14EW108 is situated on the left floodplain of the Smoky Hill River and consists of two poured concrete foundations and a light scatter of historic artifacts observed in cultivated areas around the foundations (Table 8). The area of this site includes approximately 3600 square m. Both of the foundations appear to represent footings for agricul- tural buildings such as barns. One of the foundations was, however, covered with a very dense growth and could not be fully examined.

Table 8. Artifacts collected from surface of 14EW108

Catalog Number	Frequency	Description
1	4	Brown glazed stoneware body sherd.
2	2	Clear glass bottle base with ring seam, automatic bottle machine.
3	1	Amber crown finish, automatic bottle machine.
4	2	Undecorated whiteware sherds.
5	1	Brown glazed stoneware body sherd.
	5	Clear bottle glass.
	1	Aqua bottle glass.
	1	Green bottle glass.

Artifacts collected from this site include ceramics, window glass, and bottle glass. Several elements of this collection are relatively age-diagnostic, including one bottle finish and two bottle bases. The finish consists of an amber glass crown finish manufactured using an automatic bottle machine. The crown finish was invented in 1892, and the automatic bottle machine did not come into common use until 1920 (Newman 1970; Lief 1965). The bottle bases consist of two clear glass bases with ring seams. The ring seams indicate manufacture by an automatic bottle machine after about 1920 (Newman 1970). These artifacts, the lack of earlier artifacts, and negative documentary evidence suggest a relatively recent age for this site.

14EW109 (P)

Site 14EW109 was a potential site discovered on the left bank of the Smoky Hill River. It was identified by its inclusion on both the 1901 and 1918 plats of Ellsworth County. The 1901 plat book showed that the land on which this site is located was owned by John D. Grubb, who

was listed as a farmer and stock raiser. In 1918 this land was owned by A. Kipp. This site consists of the remains of a farm/ranch settlement including a standing frame building, poured concrete foundations for three additional buildings, and two adjacent well and/or cistern features. The approximate area of this site is 12,000 sq m.

Based on our observations of this site, its oldest architectural component appears to be the standing frame building. This building is a one-room frame structure covered with a clapboard siding. The only openings in it appear to have been a door and window in a gable end. Of interest, fasteners utilized in this building are entirely square cut nails, indicating construction prior to about 1900. No foundation for this building was observed, and it is uncertain if it is in its original location.

The remaining architectural components of this site are all of poured concrete construction, and include what are interpreted as the foundation of a garage, a dwelling, and a barn. The dwelling is characterized by a partial cellar with intact stairs leading into it, footings for a porch, and footings for the structure. A variety of construction techniques, including concrete block construction, suggest that a variety of building episodes are associated with this building. Also observed at this site were two concrete features which cap either wells or cisterns, or both. These features are connected to the dwelling by a concrete walkway.

Artifacts collected at 14EW109 include ceramics, coal clinkers, bottle glass, and a marble (Table 9). Of these artifacts, only the bottle glass provides useful information on site age. Of the bottle glass, one base fragment is characterized by a ring seam, indicating manufacture by an automatic bottle machine after about 1920 (Newman 1970). Another bottle fragment is probably manufactured using an automatic bottle machine. Also in the collection from this site is a fragment of what appears to be a Coca-Cola bottle, which was first manufactured around the turn of the 20th Century.

Table 9. Artifacts collected at 14EW109

Catalog Number	Frequency	Description
1	1	Cobalt bottle base, ring seam.
	1	Opal glass fragment.
	1	Clear bottle base, probably automatic bottle machine.
	1	Aqua bottle fragment, probably Coca-Cola.
2	1	Undecorated white soft-past porcelain.
3	1	Undecorated white earthenware.
4	1	Clear glazed crockery rim sherd.
5	1	White glazed stoneware sherd.
6	2	White glazed on exterior, brown glazed on interior, stoneware sherds.

(continued)

Table 9 continued. Artifacts collected at 14EW109

Catalog Number	Frequency	Description
7	1	Salt glazed, clear slip exterior, brown slip interior, stoneware sherd.
8	1	Cobalt blue glazed soft-paste porcelain marble.
9	1	Coal clinker.

14EW110 (P)

Site 14EW110 consists of a multiple truss Missouri-Pacific railroad bridge (Bridge Number 5358) across the Smoky Hill River. This section of the Missouri-Pacific line is in active use and has been in existence since at least 1918. This bridge consists of sections of timber trestle on either side of two plate girder bridge sections. The northern plate girder section is a pony-type while the adjacent section to the south is a deck-type plate girder section. The ends of these plate girder bridge sections are supported by masonary abutments.

According to Weitzman (1980:114-115), "Plate girder bridges were specified in American railroad standards of the 1920s whenever spans of 30 to 125 feet were required", and it is possible that this bridge dates to that period. The possibility that these plate girder sections were used elsewhere prior to their use at the 14EW110 bridge is suggested by several factors. More importantly, however, is the use of through-type and a deck-type bridge section in the same bridge. These factors tend to suggest that the bridge sections used in the 14EW110 bridge may have originally been two separate bridges used to cross shorter spans but which were salvaged for use at this site.

14EW111(P)

This site consists of the remains of a farm/ranch settlement which is situated in an area of dense secondary growth on the left bank of the Smoky Hill River. This site was a potential site whose existence was indicated by its presence on the 1901 plat of Ellsworth County. The 1901 plat indicates that this land was owned by W. B. Essick in that year. Although the dense growth of weeds, vines, and brush on this site precluded its intensive survey, its major architectural components are known to include the footings of a number of sandstone and poured concrete foundations and a sandstone retaining wall. The sandstone retaining wall was the first feature observed at this site, and runs along a terrace edge for some distance along the Smoky Hill. What appears to be the remains of a dwelling was observed at this site, and consisted of a cellar or partial cellar walled with sandstone. Footings for a number of outbuildings were also observed at this site, with these being of poured concrete construction.

14EW112(P)

Site 14EW112 is the remains of a farm/ranch settlement located on the edge of the second terrace of the Smoky Hill River, on the left bank of that river. The existence of this potential site was indicated by its presence on the 1918 Ellsworth County plat. This plat lists P. M. Grubbs as the owner of the land on which this site is located. The site of this settlement is currently in use as a corral and is surrounded by cultivated field.

Observed architectural remains at this site include what appears to be the cellar of a dwelling, although the area is too disturbed to tell for certain; a sandstone cave adjacent to the possible cellar; a silage pit located adjacent to the possible cellar and cave; and a well/cistern separated from these other features by an area of cultivated field. The silage pit appears to be a recent feature at this site since its construction has disturbed other cultural features.

In addition to disturbance to this site from the construction of this silage pit, this site has been severely impacted by earth moving activities, which have substantially destroyed the probable house site and the well/cistern, and by deep plowing of the area surrounding the observed architectural features. This deep plowing has encroached on the site area and is certain to have destroyed the original integrity of site deposits in many areas.

14EW113 (*)

Site 14EW113 consists of a multiple iron truss bridge across the Smoky Hill River. This bridge is composed of three sections, with each being a pony-type Pratt truss (Comp and Jackson 1977). The Pratt truss was first used in the mid-19th century and subsequently became one of the most common types of bridges for railroad and especially for highway use (Weitzman 1980:110). This bridge is in active use on an unpaved county road.

14EW114 (P)

This site consists of what may be the remains of a farm/ranch settlement which consists of a series of poured concrete foundations and dugout depressions. It is situated on the edge of the uplands overlooking an extensive area of terraces on the right bank of the Smoky Hill River. This potential site was shown on the 1901 plat of Ellsworth County and may have been shown on the 1918 plat as well.

Observed architectural features at this site were dispersed over a wide area, approximately 14,000 sq ft, and included a poured concrete basement foundation built into the side of a slope and with a door on the west side. It is unclear from the remains of this building whether it represents a dwelling or an agricultural structure such as a small barn.

Other architectural features observed at this site include a "keyhole" shaped dugout (Lees et al. 1984) located east of the concrete foundation a dugout depression with an internal section of masonary foundation or wall, also located east of the concrete foundation; a

simple square depression to the east of the concrete foundation; and a dugout cut into the side of a slope south of the concrete foundation. The function of these dugout depressions is uncertain, although the "keyhole" depression is a classic residential shape representing a room with a sunken entranceway.

14EW115 (P)

This site consists of the remains of a number of architectural features probably representing a farm/ranch settlement. An association between this site and the nearby site 14EW114 is possible, with the former representing the owner's dwelling complex and the latter assorted agricultural outbuildings and housing for farm/ranch hands. This is however, entirely conjectural. This potential site was shown on the 1918 plat, but may have also been included on the 1901 plat of Ellsworth County.

14EW115 is situated on a point of uplands overlooking an expanse of terrace on the right bank of the Smoky Hill River. It consists of three architectural features within an area of approximately 3750 square m. Central among these architectural features is a sandstone-walled cellar foundation which appears to represent the remains of a residential building. To the immediate west of this cellar foundation is a dugout, probably representing an associated cave. It is also dug into a slope. To the north of the cellar foundation is a sandstone line well.

14EW116 (P)

Site 14EW116 consists of the remains of a ranch/farm settlement situated on the east slope of a ridge toe and on a terrace along the right bank of the Smoky Hill River. This potential site was shown on the 1901 plat of Ellsworth County, and may also be indicated on the 1918 plat as well. Ownership of this land is listed as "Fornberg" on the 1901 plat. The entire site area is currently in pasture, and can be considered as three closely related areas.

The primary area of this site includes a poured concrete basement foundation of a residential building, a poured concrete cave, and a Dakota sandstone and poured concrete cistern. These three features are tightly clustered at the base of the ridge toe on a narrow terrace remnant. A second area of this site is located on the ridge crest directly above this first area. This area includes a silage pit cut into the east side of the ridge, a poured concrete cistern, and a well. The third area of this site is situated southeast of the primary area along the terrace edge, and consists of a silage pit cut into the terrace edge and a poured concrete foundation for what was probably a barn.

14EW117 (P)

Site 14EW117 appears to be the remains of a farm/ranch settlement characterized by the ruins of a substantial sandstone building, possibly a dwelling; an adjacent sandstone cave; ruins of a substantial sandstone barn; and a variety of sandstone retaining walls and poured concrete walkways. This potential site was shown on the 1901 and 1918 plats of

Ellsworth County, and may also be shown on the 1887 plat. On the 1887 plat, a vaguely located site is shown in the vicinity of 14EW117 and is listed as a school - "S.D. Number 51". In 1901, the land on which 14EW117 is located was owned by John J. Radcliff, who was listed as a farmer and stock raiser in that year. In 1918, this land was owned by M. Hickman.

14EW117 is situated at the base of the uplands on the right bank of the Smoky Hill River. This site is located at the base of a broad ravine cutting through the uplands which are very hilly at this point. Access to this site was apparently through this ravine. In general, the site is in an exceptionally well sheltered locale. Numerous outcrops of Dakota sandstone occur in the immediate vicinity of this site, and probably served as the source of raw material for the site's architecture.

The architectural remains at this site are fairly substantial and all components apparently relied on Dakota sandstone as the primary building material. Central to this site is a massive pile of dressed sandstone blocks and several observable sections of intact wall. This ruin is interpreted as a dwelling, although use as a school is certainly possible. Several retaining walls of Dakota sandstone were observed near this ruin, and a poured concrete walkway runs betwen the apparent remains of a drive and the ruin. Adjacent to this ruin, and perhaps attached to it at one time, is a relatively intact cave. This cave is constructed of Dakota sandstone over which a cement stucco has been applied. Located to the southwest of these two ruins are the ruins of a large and substantial barn, also constructed at least partially of Dakota Sandstone.

14EW118 (*)

This site is probably one of the earliest sites inventoried during this project, and was recorded as a result of fortuitous discovery. 14EW118 is situated on a perceptible rise within a cultivated terrace field on the right bank of the Smoky Hill River. It consists of a moderate density scatter of 19th century historic artifacts covering the area of the rise, an area of approximately 4500 sq m (Table 10).

Table 10. Artifacts collected from the surface of 14EW118

Catalog Number	Frequency	Description
1	2	Aqua window glass fragments.
2	2	Amethyst bottle glass fragments.
	4	Amber bottle glass fragments.
	4	Clear bottle glass fragments.
	10	Aqua bottle glass fragments including two bases (Snap case?) and one neck with mold seam and no finish.
3	1	Aqua bottle finish, applied lip, no mold seam evident.

(continued)

Table 10 continued. Artifacts collected from the surface of 14EW118

Catalog Number	Frequency	Description
4	1	Clear bottle finish, fragmentary.
5	5	Undecorated whiteware sherds.
6	2	Blue edged, straight rimmed plate sherds.
7	12	Stoneware sherds, including both bottles and crocks and a wide variety of glazes.
8	1	Iron knife blade.
9	1	Coal.
10	1	Retouched flake.

Artifacts collected from this site include a diverse range of ceramics, bottle glass, and window glass. Also included are a knife blade, coal, and a retouched flake - the flake probably indicates the use of this site during prehistory. Although this collection includes two fragments of amethyst glass, manufactured between about 1885 and 1915 (Munsey 1970), the bulk of the artifacts from this site are much earlier. The blue edged ceramics, for example, are clearly associated with the first three quarters of the 19th century, and are a common component of sites dating before the Civil War. An aqua bottle base apparently manufactured using a snap case is further consistent with such an early date, with this technique being in use between 1855 and 1913 (Newman 1970). The aqua bottle finish with applied lip and no mold seam apparent is indicative of manufacture between about 1840 and 1913 (Newman 1970). Overall, this collection is generally consistent with collections from well documented sites on the Great Plains that were occupied between the 1830s and the end of the Civil War.

14EW119: The Black Ranch (P)

Site 14EW119 consists of the remains of a 19th and 20th century farm/ranch settlement identified by Mattes (1947) as the Black Ranch. This site is characterized by a number of standing buildings, including a 19th century dwelling and barn. The barn has a limestone block engraved with a stylized longhorn and the date 1878. This site was one of seven to be tested for National Register significance during this project, and is discussed in greater detail elsewhere in this report.

14EW120 (P)

14EW120 consists of a series of depressions situated on a ridge crest in the dissected uplands on the right side of the Smoky Hill River. The uplands in this area are dissected by a series of short, intermittent tributaries to the Smoky Hill River. This potential site was indicated by its presence on the 1918 Ellsworth County plat, which listed J. G. Bircher as the owner of the land on which this site is located. Central to this site is a rectangular depression measuring seven by eight meters, and which may represent a dugout dwelling. In

addition to the rectangular depression observed at this site, a number of less distinct depressions were observed within 25 m of this depression.

14EW121 (P)

This site appears to be the remains of a farm/ranch settlement including a number of dugout structures. It is situated on a toe of uplands projecting into the terraces on the left bank of the Smoky Hill River. As a potential site, it was identified by its presence on the 1918 plat of Ellsworth County. This 1918 plat listed the land on which 14EW121 is located as the "Side View Farm", owned by F. L. Arn.

14EW121 includes a number of dugout architectural features. Two of these are dugouts of unknown function, while a third is a relatively intact cave. Also observed at this site were two wells with concrete caps and a cistern. One of the concrete well caps was dated 1912.

14EW122 (P)

Site 14EW122 consists of the remains of a farm/ranch settlement complex situated in the uplands on the left side of the Thompson Creek Valley. This potential site was shown on both the 1901 and 1918 Ellsworth County plats. The 1901 plat lists ownership of the land on which this site is locatd as belonging to S. A. Campbell. The 1918 plat records this as the residence of M. Hodgden on the "Happy Hollow Farm". This same plat indicates that the Happy Hollow Farm was owned by Henry Hodgden.

Architectural components observed at this site focused on the sandstone and concrete foundation of a three-room building, probably a dwelling. In addition, this site includes a cave, a drilled well and water tank, and a sandstone lined shaft well. The area to the south of this site has been terraced and is currently being cultivated, both of which may have resulted in the destruction of some components of this site.

A small surface collection was made from this site, and included a porcelain button, an iron harness buckle, a variety of ceramic wares, and window glass (Table 10). None of the collected artifacts are particularly age-diagnostic, however.

Table 11. Artifacts collected from the surface of 14EW122

Catalog Number	Frequency	Description
1	1	Aqua window glass fragment.
2	1	Undecorated white soft-paste porcelain.
3	1	Undecorated white earthenware.
4	1	Heavy brown glazed stoneware rim sherd.
5	1	Iron harness buckle.
6	1	White, four-hole porcelain button.

14EW123 (P)

Site 14EW123 consists of two dugout features situated on the point of a finger of land projecting into the Thompson Creek valley. This finger of land is situated on the right side of the main channel of Thompson Creek, and is between this channel and the channel of an intermittent tributary to Thompson Creek. This site was a potential site indicated by its presence on the 1901 plat of Ellsworth County. This plat indicates that the land on which this site is located was owned by J. F. Kenyon in 1901.

Architectural remains observed at this site include two dugout depressions. The first of these is a circular depression that is approximately 2 m deep and 4 to 5 m in diameter. Located about 7 m southwest of this depression is a rectangular depression measuring about 3.5 by 4.5 meters. Flagstones and sandstone blocks were observed in association with this rectangular depression. This site is located in a wooded area, and its observed remains cover an area of only about 300 sq m.

14EW124 (P)

This site is located across the valley of an intermittent tributary from site 14EW123. This tributary flows into Thompson Creek, and site 14EW124 is situated on an upland slope on the right side of the Thompson Creek valley. This potential site was shown on the 1918 Ellsworth County plat, when this land was owned by C. S. Bath.

Architectural remains associated with this site include at least three buildings. Two of these are dugout depressions, although neither is very distinct. The third building consists of a sandstone foundation which is only partially visible above the ground's surface.

14EW125 (P)

Site 14EW125 consists of the substantial architectural remains of a masonary dwelling. It is situated at the base of the uplands on the right side of the Thompson Creek valley. This potential site was indicated on both the 1901 and 1918 plats of Ellsworth County. The 1901 plat lists ownership of the land on which 14EW125 is located as belonging to E. Becker, who is additionally listed as a farmer and stock raiser. In 1918, this site is shown as consisting of one building and a spring, and ownership is listed as belonging to B. P. and H. B. Becker.

Observed architectural remains at this site were restricted to the remains of a single masonary building. This building is, however, one of the more architecturally intact buildings observed in the project area. It is characterized by a partial basement walled with Dakota sandstone and substantially intact exterior walls, also of Dakota sandstone, outlining this "L" shaped structure. Stairs lead from the partial basement to both the interior and exterior of this building. The interior of the standing walls of this building retain plaster, and wood framing and finish work around the intact windows are fastened with square cut nails, indicating construction during the 19th century.

14EW126 (P)

This site consists of the remains of what appears to be a farm/ranch settlement situated on the left bank of Clear Creek about one-half mile before it flows into the broad Smoky Hill River valley. This potential site is shown on both the 1901 and 1918 Ellsworth County plats. The 1901 plat lists this land as belonging to A. V. B. Polhemus, et al. On the 1918 plat, however, the land on which 14EW126 is located is listed as part of the "Grove Farm", owned by J. L. Sternberg.

Observed architectural remains at this site consist of a poured concrete foundation of what appears to be a dwelling, and a Dakota sandstone foundation of a barn. This site is relatively small, with its observed components covering an area of only 2500 sq m.

14EW128 (P)

Site 14EW128 consists of the apparent remains of a farm/ranch settlement situated on the left side of the Alum Creek Valley several miles above its confluence with the Smoky Hill River. This potential site is shown on the 1918 plat of Ellsworth County, which identifies it as lying on the "Elmdale Guernsey Farm" owned by O. B. Smith.

This site is characterized by a number of architectural components including a standing barn. Of interest, a largely intact and well preserved light utility wagon was recovered from this barn by government personnel, and is currently stored for safekeeping at the Lake Kanopolis project office. In addition, this site includes a Dakota sandstone foundation of what is probably a dwelling, a pump well, and a shaft well.

14EW129 (P)

This site consists of a number of dugout depressions and a historic artifact scatter located within the Venango Public Use area. This site is situated on the uplands bordering the left side of the Smoky Hill River valley. This potential site is shown on the 1901 and 1918 plats of Ellsworth County. In 1901, the land on which this site is located is listed as belonging to Lewis H. Lapham. In 1918 it is listed as part of the "Midland Division" of lands belonging to Lewis H. Lapham. Lapham was one of the largest landholders in the project area in both 1901 and 1918.

14EW129 is characterized by a number of dugout depressions of unknown function. In all, three depressions were observed, with one being exceptionally large - 15 by 28 meters. A scatter of historic artifacts was observed in the vicinity of these dugouts in roads constructed for picnic access within the Venango Public Use Area. No collections were made from this site.

14EW130 (*)

Site 14EW130 is located adjacent to but outside government property below the Lake Kanopolis Dam, on the left side of the Smoky Hill River valley. This site was discovered during the search for a potential site which was not found. 14EW130 may represent this potential site, which was shown on the 1887 and 1918 plats of Ellsworth County. Of interest,

the 1887 plat shows the Vanango Post Office in the vicinity of 14EW130. The vague locational information provided by this plat extends the possibility that this site and 14EW130 are the same. The 1918 plat of Ellsworth county indicates that this site may be one shown as belonging to Dewitt H. Curtis.

14EW130 is located in a cultivated field on a low but perceptible ridge. It consists of a fairly dense scatter of historic artifacts over an area of approximately 3750 sq m. An important component of this site, and the component which resulted in its discovery, is a small family cemetery. This cemetery is surrounded by an iron fence, and contains a lone marker. This marker commemorates the death of Adeline P. and W. S. Gile:

Adaline P. wife of W. S. Gile
Died Feb. 6, 1900
Aged 83 years
She sleeps the sleep of the just

W. S. Gile
Died Jan. 8, 1904
Aged 91 Yr. 11 Mo. 27 D.
He sleeps his last sleep

This cemetery is located on the eastern periphery of 14EW130.

A small surface collection was made at this site, and includes a wire nail, a fragment of an ironstone cover to a serving dish, an iron butt hinge, and two fragments of window glass (Table 12). None of these artifacts is particularly age-diagnostic. The observed scatter of artifacts at this site included a large frequency of both ceramics and bottle glass, and overall the site appears to be that of a domestic/residential settlement.

Table 12. Artifacts collected from the surface at 14EW130

Catalog Number	Frequency	Description
1	2	Window glass fragments.
2	1	Ironstone cover to a serving bowl, overglaze decoration.
3	1	Wire nail.
4	1	Iron butt hinge.

14EW131 (P)

This site consists of a standing school house located on the left bank of an unnamed tributary of the Smoky Hill River, below the Kanopolis Dam. The land on which this site is located is within the government's overflow easement. This potential site is shown on both the 1901 and 1918 plats of Ellsworth County. The 1901 plat lists this site as School No. 15, on land owned by N. G. Lawson. The 1918 plat simply lists this site as "School".

This school building is abandoned but appears to be in very good condition at present. The building appears to be intact and original on both the exterior and the interior. It is a one room school house with a foyer, and measures approximately seven by 12 m. It is of frame construction fastened with square cut nails, indicating construction during the 19th century.

14EW132 (P)

Site 14EW132 consists of the remains of a farm/ranch settlement situated on a point of land between two intermittent tributaries of an unnamed tributary of the Smoky Hill River. This site is situated within the government's overflow easement for Lake Kanopolis, and is located below the Kanopolis Dam. This potential site is shown on the 1918 plat of Ellsworth County, with ownership shown as belonging to H. M. Hughes.

This site is characterized by numerous architectural remains including a number of standing structures and other buildings for which only the foundations remain. Standing architecture observed at this site includes a frame barn and a frame shed, both of which were clearly erected during this century. Other architectural remains observed at this site include the poured concrete foundation of a dwelling, which is characterized by a partial cellar filled with large, dressed sandstone blocks; a slab foundation for an outbuilding of unknown function; a poured concrete foundation for another outbuilding of unknown function; a wood timber foundation for what appears to have been an agricultural shed and a cave.

14EW133 (P)

Site 14EW133 consists of the poorly preserved remains of what appears to have been a farm/ranch settlement located in the upper reaches of an unnamed, intermittent tributary of the Smoky Hill River. This site is located within the government's overflow easement below the Kanopolis Dam. This potential site was indicated by its presence on the 1918 plat of Ellsworth County. This plat shows this site as a residence on the "McInnes Ranch", owned by Robert McInnes.

This site consists of four intact or partially intact architectural ruins and a number of piles of building rubble that have been pushed up by machine and that may represent the former locations of buildings. In the approximate center of this site there is a largely intact single room building constructed of Dakota sandstone. Window framing on this building has been fastened with wire nails, suggesting construction during this century. To the north of this building is a shaft well lined with Dakota sandstone; a foundation of Dakota sandstone which has been partially destroyed by machinery; and a relatively intact Dakota sandstone foundation of a small building.

To the west and southwest of these relatively intact architectural remains are a number of piles of building rubble. These piles are composed of Dakota sandstone and poured concrete elements, and have obviously been pushed up or dumped. It is probable, given the partial destruction of one of the previously described foundations, that these piles of building rubble represent the former locations of once intact architectural elements of this settlement. The amount of mechanical disturbance to this site has certainly done much to destroy its integrity, although certain portions of this site may contain intact archaeological deposits.

14EW134 (P)

Site 14EW134 is potentially one of the older sites discovered within the project area. It is situated on a terrace on both sides of an intermittent tributary of Bluff Creek, on the right side of the Bluff Creek valley. This site may be shown on the 1887 plat of Ellsworth County, which shows a school - "S.D. 5" - within the quarter section within which 14EW134 is located. Most of this quarter section is covered by the dissected valley wall of Bluff Creek, and the site of 14EW134 does represent perhaps the best settlement location in the quarter section.

14EW134 currently serves as the location of an abandoned but relatively modern red ceramic block grain elevator. This elevator is, however, situated within an older settlement with architectural features located on both sides of an intermittent creek. The majority of this settlement appears to be located on the left bank of this creek, and includes a large (8 by 14 m), dressed Dakota sandstone foundation; a dugout depression probably representing a cave; a shaft well which may be surrounded by a sandstone foundation for a well house; and a sandstone walled building which has been partially destroyed by a county road. The size of this partially destroyed building could not be determined since only parts of two walls could be observed. These buildings on the left bank are all oriented with magnetic north.

On the right bank of the creek, a lone architectural feature was observed. This consists of a dry masonry Dakota sandstone feature measuring about 24 m long by at least 6 m wide. This feature is constructed into the side of a low ridge, and is open on one side. Its function is uncertain but, due to this dry masonry construction, it probably represented some form of holding pen for livestock rather than a building such as a barn. It is possible that this is a later feature, perhaps constructed with stones robbed from the features on the left bank. The fact that it is not oriented with magnetic north as are the other features at this site tends to support this interpretation.

14EW135 (*)

Site 14EW135 consists of an isolated and fortuitous find of agricultural equipment. It is situated on an upland slope on the edge of the valley of an intermittent tributary of Bluff Creek. While such finds of abandoned agricultural equipment are not at all unusual in Kansas and within the project area, this find is unusual and deserves special attention. 14EW135 represents the relatively well preserved

remains of an early hay stacker. This hay stacker is constructed almost entirely of wood and works much the way a fork-lift does. This machine was, however, operated entirely with draft animals and by human labor. Early hay stackers such as this are rare on the Kansas landscape.

14EW136 (P)

This site consists of the remains of a farm/ranch settlement located on a point of uplands between Bluff Creek and an intermittent tributary of Bluff Creek. It is on the left side of the Bluff Creek valley. This potential site shows on both the 1901 and 1918 plats of Ellsworth County. On the 1901 plat, 14EW136 is shown belonging to Jno. L. Mason and in 1918 as belonging to W. G. Bircher.

14EW136 consists of a number of architectural elements distributed over an area of approximately 6500 sq m. These features include the poured concrete foundation of a dwelling; two concrete pillars located in front of the dwelling foundation and apparently serving decorative functions; an intact poured concrete cave; a poured concrete cistern; two shaft wells; a Dakota sandstone foundation, probably to an agricultural building; a poured concrete slab foundation, probably also an agricultural outbuilding; and a poured concrete foundation, likewise probably representing an agricultural function.

14EW137 (P)

Site 14EW137 is situated on the left bank of the Smoky Hill River on an extensive expanse of terrace directly across from the confluence of Thompson Creek and the Smoky Hill River. This potential site was shown on both the 1901 and 1918 plats of Ellsworth County. The 1901 plat shows the land on which 14EW137 is located as belonging to John and John F. Butler, who are also listed as farmers and stock raisers. The 1918 plat, however, shows this site to be the residence of R. F. Vague on the "Horse Shoe Bend Stock Farm", owned by the Joseph Peppiatt and R. Vague Estate.

Only one architectural feature was observed at this site. The area surrounding this potential site is covered with an exceptionally dense cover of weeds, which in many areas exceed 2 m in height, and which precluded an intensive survey for archaeological remains. Due to the ground cover, in fact, no attempt could be made to locate two potential sites located north of this site.

The architectural feature that was found at this site is an intact structure consisting of a two room building with a cistern on the roof. The walls of this building and cistern are made of Dakota sandstone, while the roof of both the building and cistern are of poured concrete construction. The placement of a cistern on the roof of this building, and as an integral part of its construction is somewhat unusual; it was probably placed there to provide for water pressure. At any rate, this building is of fairly recent construction as is attested to by an inscription on a concrete stuccoed window sill, which reads "Builders/ Russell Peppiatt/ Joe Peppiatt/ Tom Peppiatt/ 10 20 1938". No evidence of the buildings that were apparently at this site in 1901 and 1918 was observed.

14EW138 (P)

Site 14EW138 consists of an agricultural site situated on the left bank of the Smoky Hill River. This potential site is shown on the 1918 plat of Ellsworth County, which identifies it as part of the "Spring Valley Stock Farm" owned by John R. Black. This site is situated on a bluff overlooking the Smoky Hill River, with part of the observed features being located on the bluff top and some on the bluff slope. On the bluff top, a 20th century frame agricultural shed was observed, as was a well and windmill foundation. Below these features, on the bluff slope, a poured concrete structure of unknown function was observed. This feature may be a filled in cave or spring house.

14EW139 (R)

Site 14EW139 is located on the right side of the Red Rock Canyon about one mile above its confluence with the Smoky Hill River valley. This site consists of a rock overhang that Mattes (1947) suggests was used by early homesteaders as temporary shelter. This site is one of seven to be tested archaeologically during this project, and is discussed in greater detail elsewhere in this report.

14EW140 (P)

This site is situated on the left bank of an unnamed tributary of the Smoky Hill River not far from its confluence with that river. It is located below the Kanopolis Dam in the government's overflow easement. 14EW140 is a potential site shown on both the 1901 and 1918 plats of Ellsworth County. Both plats show this land belonging to T. R. Tolksdorff.

14EW140 has been extensively disturbed by agriculturally related earth moving activities, mainly associated with hedge removal. The only architectural feature observed at this site consisted of a rectangular depression which appears to have been the location of a building which has been moved and for which the foundation has also been removed. In addition, the earth moving activities near this site exposed an area of modern refuse. Only one artifact was observed which may be indicative of an early 20th century occupation was observed at this site, and consisted of a sherd of green transferware ceramics.

14EW141 (*)

14EW141 is the site of an abandoned and destroyed late 19th or early 20th century bridge across an unnamed tributary of the Smoky Hill River. It is located below the Kanopolis Dam in the government's overflow easement. This bridge crosses this tributary just above its confluence with the Smoky Hill River, and was the subject of a fortuitous discovery. What remains of this bridge, which lies on a quarter-section line, is limited to the right bank of the tributary, and includes an earthen ramp leading to a sandstone masonry abutment and a few twisted members of a steel bridge of unknown type. No evidence of this bridge could be found on the opposite side of the tributary.

14EW142 (P)

Site 14EW142 is situated on a terrace on the right bank of an unnamed tributary of the Smoky Hill River. This terrace is deeply dissected by this tributary at this point, and 14EW142 is located immediately above this tributary on the adjacent bluff. 14EW142 is located below Kanopolis Dam in the government's overflow easement. This potential site is shown on the 1901 and 1918 Ellsworth County plats. The 1901 plat indicates that the land on which this site is located belonged to Nelson G. Lawson, while in 1918 it belonged to Swan E. Krig.

14EW142 is situated within a cultivated field. Its observed components include two Dakota sandstone building ruins and a scatter of historic artifacts in the surrounding field (Table 12). The buildings observed at this site include a structure built into the side of a slope, and probably representing a basement foundation although it could just as easily have been a single story building. Arguing against this latter interpretation are the absence of windows, which would be more typical of a basement than a single story structure. The second building at this site is much smaller, and consists of a sandstone foundation approximately 1.5 m in height. The size of this building suggests that it was an outbuilding of some sort, although its construction gives few details as to its former function. Wire nails are associated with both structures, suggesting construction in this century. Of interest, both buildings contain burned refuse, including burned nails, and the trees which have grown up around their foundations are severely scorched. This evidence suggests that until recently these buildings may have had intact frame components which have now been destroyed by intentional firing.

Table 13. Artifacts collected from the surface of 14EW142.

Catalog Number	Frequency	Description
1	1	Window glass fragment.
2	1	Embossed panel of an aqua glass bottle, embossed with "...PIT..."
3	1	Clear glass cork closure bottle finish, automatic bottle machine.
4	1	Crown bottle cap.
5	1	Soft-paste porcelain sherd, probably from a doll.

The artifacts collected from this site are generally suggestive of a 20th century date. Important in this determination are the crown bottle cap, in use only after 1892 (Lief 1965) and the clear glass finish of a bottle manufactured by an automatic bottle machine, probably after about 1920 (Newman 1970).

14EW143 (P)

This site is situated on the edge of an upper terrace on the right bank of the Smoky Hill River. It is located within the government's overflow easement below the Kanopolis Dam. It is a potential site that is indicated on the 1918 plat of Ellsworth County, and probably on the 1901 plat as well. On the 1901 plat, the land on which this site is located is shown as belonging to Wm. Kindt and in 1918 to the estate of Wm. A. Kindt.

Observed archaeological remains of this site include a pile of Dakota sandstone building rubble probably representing the ruins of a bulldozed dwelling, an adjacent poured concrete cave, a shaft well, a collapsed frame outbuilding on a poured concrete foundation, and an extensive scatter of historic artifacts in the cultivated fields which surround this site (Table 14). The general appearance of this site suggests that it may have been used until the mid-twenthieth century.

Table 14. Artifacts collected from the surface of 14EW143

Catalog Number	Frequency	Description
1	1	Amethyst bottle fragment.
2	1	Amethyst hand-finished bottle finish.
3	1	Makers mark on a white earthenware sherd.
4	1	Polychrome decalcomania on a white soft-paste porcelain.
5	1	Polychrome, floral decalcomania on a white soft-paste porcelain plate fragment.
6	1	White earthenware handle (pitcher or serving).
7	1	Polychrome, floral decalcomania on white earthenware.
8	1	Maker's mark, "Hand Painted, Made in Japan", on a soft-paste porcelain sherd.
9	1	Polychrome soft-paste porcelain.
10	1	Flown blue earthenware rim sherd.
11	1	Stoneware sherd, white glaze on interior, black on exterior.
12	1	White porcelain door knob fragment.
13	1	Machine cut nail.
14	1	12 gauge "Winchester Leader" shotgun cartridge.

Artifacts collected from 14EW143 include a wide range of ceramics and bottle glass, and are generally indicative of a domestic/residential function. In general, the collection appears to date between the late 19th century and the 1920s or later. Important to this conclusion are an amethyst glass, hand finished bottle finish, indicating a date between about 1885 and 1915; a fragment of amethyst bottle glass, also dating between 1885 and 1915; and a square machine cut nail, indicating use of the site prior to 1900 and a sherd marked with "Made in Japan",

indicating a date after about 1921 (Stitt 1974:149-150). Other artifacts, especially the decalcomania, are less useful for dating the site, but are not inconsistent with a date range starting in the late 19th century.

14EW144 (P)

Site 14EW144 consists of the site of a farm/ranch settlement that was removed following the flood of 1951 and that was shown on both the 1901 and 1918 plats of Ellsworth County. This site is situated within the government's overflow easement below the Kanopolis Dam, and is on the left bank of an unnamed tributary of the Smoky Hill River. The 1901 plat of Ellsworth County reveals that in that year the land on which 14EW144 is located belonged to Peter Yungren. In 1918, this site was shown as the residence of Oscar Youngren on the Hillside Stock Farm", owned by Peter Yungren.

This site is currently in use for agricultural storage and as a holding area for livestock. Observed architectural remains include a poured concrete cellar foundation, possibly to a dwelling, with red tile brick fragments around the top. Also observed were several poured concrete foundations, one of which was probably a barn, and several concrete slab foundations.

14EW145 (*)

14EW145 consists of the remains of what appears to have been a farm/ranch settlement. It is situated at the base of the uplands along an extensive area of terraces on the right bank of the Smoky Hill River. This site was not shown on any of the historical plats examined, but was obvious on the landscape. Its failure to appear on any of the plats probably attests to its relatively recent age. This site consists of several architectural ruins, all of which are of poured concrete construction. The main foundation is the cellar/foundation of a dwelling-fragments of red tile bricks are imbedded in the top of the concrete foundation walls. To the west of this foundation is a small poured concrete lean-to type outbuilding. Beyond this building is the foundation of what appears to have been a barn.

14EW146

Site 14EW146 is situated on an area of terrace adjacent to and on the right bank of the Smoky Hill River. It appears to have been a farm/ranch settlement, and is shown on the 1918 Ellsworth County plat. This plat indicates that the land on which this site is located was part of the "Smoky Hill Stock Farm", owned by C. H. Howard. This site is located in an area of dense weed and scrub tree cover, and as a reuslt could not be fully surveyed for cultural features. The only cultural features observed at this site include a silage pit, probably of relatively recent construction; a foundation with a partial cellar, probably representing a dwelling; and the collapsed remains of a barn constructed with wire nails.

14EW147 (P)

Site 14EW147 is situated on a terrace on the left bank of the Smoky Hill River. It is a potential site that is shown on both the 1901 and 1918 plats of Ellsworth County. In 1901 and 1918, the land on which

this site is located is shown as belonging to Elias M. Straley. This site was occupied until mid-1984 by Leslie Straley, who had been living in the cave.

This site is covered with a thick cover of weeds, and an intensive survey for cultural features could not be carried out. The only architectural feature that was observed at this site consisted of the poured concrete cave that was occupied by Straley until recently. This cave was piled with a mass of rotting clothing, paper, and furniture. The surface of this site was strewn with an amazing amount of recent refuse, the most common element of which were empty bottles of Jack Daniels Green Label Whiskey. The Straley estate was auctioned recently and old rusty truck and some rusty farm machinery which could not be sold were left adjacent to the site on government property.

14EW148 (P)

This site is situated on the terraces along the right bank of the Smoky Hill River. It is located between two potential sites, one shown in 1901 and one in 1918, and may represent either, both or neither. The 1901 potential site is located on land owned at that time by Jos. W. Huggins, who was listed as a farmer and stock raiser. The 1918 potential site was on the "Cedar Lawn Farm", owned by N. A. Huggins.

This site has been extensively disturbed by earth moving activities. Features observed at this site include three piles of pushed-up building rubble, probably representing former buildings; an intact sandstone and concrete cave; a well/windmill foundation; and a well with a concrete cap. This latter well is inscribed with "G. A. Black 10-1-1954". Based on the observed condition of this site, it is not felt to have any archaeological integrity.

14EW149 (P)

This site is located on the river edge of an expansive area of terrace on the right bank of the Smoky Hill River. It is a potential site that is shown on the 1901 and 1918 Ellsworth County plats. The 1901 plat shows this land as belonging to A. B. Stamps. The 1918 plat shows it as the residence of J. F. Stamps on the "Shady Glen Stock Farm", owned by A. R. Stamps.

This site has been extensively disturbed by earth moving activities, and is covered with a dense cover of weeds, making thorough coverage of the vicinity impossible. All that was observed at this site was an intact cave and a badly disturbed, pushed-up foundation of Dakota sandstone and concrete. Considering its proximity to the cave, this pile of building rubble probably represents the former location of a dwelling.

14EW150 (*)

This site is situated on a ridge within the dissected uplands along the right bank of the Smoky Hill River. It was a fortuitous discovery coming about during the survey for two potential sites, both of which were shown on the 1918 plat, but neither of which were discovered. It is possible that this site may be related to one of these potential sites.

This site consists of a very faint rectangular foundation evidenced by a low earthen ridge and occasional sandstone rocks. At the east end of this foundation is an abandoned cast iron and steel stove, which originally drew attention to this site. 14EW150 is set on a very high point of land on an upland ridge. No other cultural features were observed in the vicinity of this site.

14EW151 (*)

Site 14EW151 is one of the earliest and largest sites discovered during this project. It is, however, located outside of government land. Its discovery along the left bank of Spring Creek was a fortuitous result of our intensive survey of the area surrounding the reported location of the site of Fort Ellsowrth, 14EW26.

This site consists of an at places dense scatter of 19th century artifacts over an area of approximately 16,000 sq m (Table 14). The collection from this site included a diversity of ceramics and bottle glass, many of which are age-diagnostic. Ceramics collected from this site included a sherd of the rim of an annular ware vessel decorated with blue bands. Diagnostic bottle glass included an aqua finish with an applied lip (1890-1913); two aqua finishes with a mold seam reaching only to the base of the neck (1845-1913); one aqua finish with no mold seam apparent on the neck (1845-1913); and an amethyst finish with a mold seam extending to within 1/4 inch of the lip (1880-1913). An aqua bottle base embossed with an "H" mark dates to the 1858-1904 period. Also extremely age-diagnostic was a cartridge case recovered from this site. This rim-fire cartridge carries the head-stamp of "J. G.", probably indicating manufacture by Joseph Goldmark (See Figure 21). This mark is found on Spencer cartridges of the Civil War Period (White and Munhall 1963:29).

Table 15. Artifacts collected from the surface of 14EW151

Catalog Number	Frequency	Description
1	1	Aqua bottle base embossed with "H".
2	1	Aqua bottle finish and part of body, mold seam 1/2 inch below base of lip and 3/4 inch from top of lip. Bottle was embossed.
	1	Aqua finish, no mold seam on neck.
3	1	Amethyst finish, mold seam extends to within 1/4 inch of lip.
4	1	Aqua finish, applied lip.
5	1	Aqua finish, mold seam extends to 1 3/4 inches of lip.
6	1	Fragment of a maker's mark on whiteware, unidentifiable.
7	1	Green transferware sherd.
8	1	Fragment of a maker's mark on whiteware, unidentifiable.

(continued)

Table 15 continued. Artifacts collected from the surface of 14EW151

Catalog Number	Frequency	Description
9	1	Undecorated white soft-paste porcelain sherd.
10	2	Flown blue sherds.
11	1	Flown blue rim sherd.
12	1	Annular rim sherd, blue banded on white.
13	1	Stoneware crockery rim sherd.
14	1	Yellow glazed stoneware chamber pot rim.
15	1	Hand painted stoneware crockery fragment.
16	1	Red glazed earthenware sherd.
17	1	Cartridge case, rimfire, carries "J. G." headstamp.
18	1	Horse shoe.
19	1	Mule shoe.

Despite the presence of certain late 19th century artifacts at this site, such as the above described amethyst bottle finish, the collection is in general consistent with that typical on sites from the mid to early 19th century. This date is consistent with an association between this site and the Smoky Hill Trail/Denver Express Road as well as with Forts Ellsworth and Harker.

The entire site area is located in a cultivated field, and the site itself is located along the route of the Denver Express Road or Smoky Hill Trail, in use during the 1860s. In general, the scatter at 14EW151 is consistent in age with the sites of Forts Ellsworth and Harker. Although contemporary with these forts, this site is felt to be associated with traffic along the Smoky Hill Trail/Denver Express Road. Located at a sheltered location along a stream, and located near Fort Ellsworth and subsequently Fort Harker, 14EW151 represents an ideal camp ground for travelers along the Smoky Hill Trail/Denver Express Road.

14EW152: The Millett (Larson) Ranch (P)

Site 14EW152 is situated at the base of the uplands along the right side of the Smoky Hill valley, just below its confluence with Bluff Creek. This site is shown on the 1918 plat of Ellsworth County, where it is listed as the residence of H. A. and Elvin Larson on the "Smoky Hill Ranch", owned by Olaf Larson. This site contains a number of architectural features, all of which probably date from the early 20th century. This site was described as the Millett Ranch by Mattes (1947) and was one of seven sites to be archaeologically tested for National Register eligibility during this project. 14EW152 is discussed in greater detail elsewhere in this report.

14EW153: Smoky Hill Trail/Denver Express Road (P)

This site represents a section of the Smoky Hill Trail or Denver Express Road located in the uplands on the left side of the Smoky Hill River. According to Mattes (1947:4) this road "was important during the

1860s as the main route of travel to Fort Riley and points east and as a stage line from Leavenworth to Denver". The remains of this road consist of an in places perceptible depression in the unbroken prairies. This portion of the Smoky Hill Trail/Denver Express Road was one of 11 sites to be evaluated for National Register significance as a result of this project, and is discussed in greater detail elsewhere in this report.

14EW154: Horsethief Creek Stage Stations/Homestead Dwellings (P)

Site 14EW154 consists of several miles of Dakota sandstone fences located along Horsethief Creek in the Venango Public Use Area. These fences, which enclose hundreds of acres, apparently served as corrals and according to Mattes (1947) were associated with several alleged stage stations or homestead dwellings along Horsethief Creek. These buildings are inundated below the normal pool of Lake Kanopolis, and the stone fences themselves are partially inundated and can be followed across the eroded shores of the lake into the water. This site is one of seven sites to be evaluated archaeologically for National Register eligibility, and is discussed in greater detail elsewhere in this report.

Significance of Inventoried Sites

The survey of potential archaeological sites conducted during this project has had a significant effect on the cultural resources inventory of Ellsworth County and the Kanopolis Lake area. When compared to the 93 sites previously recorded in this county, the 55 recorded during this project can be seen as numerically important (Table 16). But of more importance than the number of sites recorded is the type of site recorded. Fifty-three of the 55 new sites recorded were historic sites. Prior to the survey few historic sites were recorded within Kanopolis Lake project lands and one of these was recorded because of its prehistoric component. The recent survey has clearly done much to identify historic resources of the project area.

Despite the theoretical questions surrounding the representativeness of the inventory of historic sites at Kanopolis Lake as a result of the project, a wide range of historical archaeological resources have been identified. These are summarized in Table 16. At a provisional level at least, there is a need to attempt to identify the level of National Register significance or potential significance of these inventoried cultural resources. This need is related directly to management needs of the Kanopolis project, which requires that these and all other cultural resources on project lands be managed according to their eligibility for listing on the National Register of Historic Places.

Table 16. Summary of historical archaeological resources inventoried during our survey of the Kanopolis Lake project.

Site Type	Frequency	Site Number (Less Prefix)
Agricultural Settlements	32	7, 103, 108, 109, 111, 112 114, 115, 115, 117, 119, 121, 122, 124, 125, 126, 127, 128, 132, 133, 136, 137, 140, 142, 143, 144, 145, 146, 147, 148, 149, 152
Bridges or Fords	6	104, 105, 106, 110, 113, 141
Civic Sites	4	103, 130, 131, 134?
Dugouts, Unknown Function	3	120, 123, 129
19th Century Scatters	3	118, 130, 151
20th Century Scatters	3	10, 107, 130
Historic Trails	3	105, 106, 153
Agricultural Equipment/ Non-Building Features	2	135, 154
Miscellaneous Sites	2	139, 150
Cemeteries	1	130
Agricultural Outbuildings	1	138
Military Sites	1	26

*Numbers underlined are cross-listed under two or more type headings.

At the outset consideration of the significance of sites discovered during survey is limited by the preliminary nature of survey data. Survey data is typically insufficient for detailed determinations of the National Register significance of a site. As with the eleven sites evaluated for their National Register significance during this project, further research in the form of testing or non-testing studies is often needed before a site can be determined eligible or ineligible. Based on survey data alone, newly inventoried sites can generally only be stratified into three categories:

1) Sites which are clearly ineligible for listing on the National Register of Historic Places. Sites which have clearly been destroyed are a good example of this category.

2) Sites which are clearly eligible for listing on the National Register of Historic Places. Sites which have a clear integrity of preservation and a clear historical theme of importance would fall into this category.

3) Sites which are neither clearly eligible or ineligible for listing on the National Register. Sites which fall into this category generally represent the majority of newly inventoried sites. These sites are in need of further research, either through testing or non-testing approaches, before their National Register significance can be determined.

For prehistoric archaeological sites, further research in the form of testing is often recommended for all sites which appear to be well preserved. Testing is a de facto requirement for prehistoric sites because this is the only source of systematic information about the site. On prehistoric sites archaeology is the only way to develop basic descriptive site data. The numerical size of systematic historic site inventories, only hinted at in the present study, does, however, present a problem of practicality when this approach is attempted. Testing of archaeological sites, whether they be historic or prehistoric, is expensive and should be used as conservatively as possible. Although testing is commonly the only means of defining National Register significance for prehistoric sites and for many historic sites, our greater access to data other than that derived from archaeological testing should make it possible to provide a more concise evaluation of significance than is typically found in prehistory.

In developing conclusions on the National Register significance of historical archaeological sites on the basis of survey data, it is essential to keep in mind the goals of the National Register. While Criterion D of the guidelines for determining National Register eligibility - stating simply that sites are significant if they possess or are likely to possess information important in prehistory or history - can be construed to bestow significance on every site with integrity of preservation, this does not appear to be in keeping with the intent of the National Register. Most would agree that the National Register was established to preserve those sites with outstanding national, state, and/or local importance and a sample of sites representative of the patterns and processes of our nations prehistoric and historic past.

Unless a project, such as the Kanopolis Lake project, includes all examples of a site-type or includes within its bounds an entire culture area, the sites considered within that area must be seen as part of a larger population of sites. None of the sites within a project area are necessarily significant, therefore, as part of a representative sample of a site-type.

In considering significance of historic sites inventoried within a proscribed geographic area, therefore, an initial step is to define the site types represented. It is within these type-categories that significance can best be addressed, with important criteria for evaluation being integrity of preservation and redundancy. The goal is

to define sites which are both well preserved and which preserve a rare site type or a site of clear historical importance.

In the following discussion, the sites contained within 12 site-type categories defined for this project are reviewed (See Table 16). For each category, questions of site redundancy, and limitations in our abilities to define National Register significance will be reviewed and evaluated.

Agricultural Settlements

Agricultural settlements are sites which contained obvious buildings or building ruins, and which could be clearly associated with settlements on an agricultural unit such as a ranch or farm. These sites were the most numerous in the project area, with a total of 32 sites falling into this category. One of these sites, 14EW103 was tested archaeologically during this project and was determined to be not significant in relation to National Register criteria. The reasons for this determination can be extended to all sites within this category, although limitations in our data at hand preclude a wholesale assignment of this determination of non-significance to the 31 other agricultural sites inventoried.

Although archaeological testing at 14EW103 determined this site to be well preserved, it was not felt to represent a significant resource for a number of reasons. First, the site's architecture was ruined, ruling out significance for architectural reasons. Second, while the site was apparently that of a post office in addition to an agricultural settlement, this specialized function was not expected to be preserved archaeologically. Historical and archaeological evidence showed that this site was occupied over a very long period of time, a situation which decreases the clarity of the archaeological record. Through archaeological and general historical evidence, the archaeologically preserved agricultural function of this site as an agricultural settlement occupied for an extended period of time was shown to be a common resource type within the project area and was further known to represent a very common resource type in the region. 14EW103 was therefore determined to be a redundant resource which was duplicated both within and outside the project area. Finally, detailed historical research on this site failed to establish an outstanding level of historical importance through association with historically significant events or persons. Essentially, then, this site could not be determined significant for architectural, archaeological, or historical reasons.

With the exception of 14EW7, 14EW109, 14EW119, 14EW125, 14EW128, 14EW133, and 14EW137, all of which are characterized by standing architecture, the agricultural sites inventoried during this project are similar to 14EW103 in that they all appear to represent examples of long occupation, agricultural settlements common to the region. At a provisional level, these sites without standing architecture can all be considered as redundant data sources.

Present understanding of these sites is imperfect, however, and it is not possible to develop a firm determination of their National

Register significance. Essentially, none of these sites has been subjected to detailed, site-specific historical research and, as a result, it is not known if any of them possess unusual historical importance. While they do not appear to be significant architecturally or archaeologically, the possibility does remain that they possess historical significance of a magnitude that would warrant nomination to the National Register of Historic Places. In essence, then, historical research on any of these archeologically redundant sites may add a non-redundant aspect sufficiently important to warrant a nomination to the National Register.

It is important to remember at this point that the National Register is a listing of significant, physical properties. If any of these agricultural sites are determined to be significant for historical reasons, therefore, their integrity of preservation becomes an important criteria. If a site with clear historical significance has been physically destroyed or damaged substantively, it will probably not qualify for listing on the National Register.

In reviewing the 32 sites within this type-category it is possible to identify 23 as appearing to have a high degree of integrity of preservation (including seven with standing architecture) and nine as having been largely destroyed (including one with standing architecture). Sites with a high degree of integrity include 14EW7, 14EW103, 14EW108, 14EW109, 14EW111, 14EW114, 14EW115, 14EW116, 14EW117, 14EW119, 14EW121, 14EW124, 14EW125, 14EW126, 14EW127, 14EW128, 14EW132, 14EW136, 14EW137, 14EW145, 24EW146, 14EW147, and 14EW152. Of these, through archaeological testing, 14EW7 has been evaluated as a significant resource and 14EW103 as a non-significant resource. Those that have been destroyed or substantively damaged include 14EW112, 14EW122, 14EW133, 14EW140, 14EW142, 14EW143, 14EW144, 14EW148, and 14EW149.

A total of 23 remaining sites with a high degres of integrity of preservation are left, 21 of which may also have an unusual level of historical importance. These potentially significant sites will require site-specific historical research to determine whether or not they possess unusual historical importance of sufficient merit to warrant their nomination to the National Register of Historic Places. If not, they should be considered as non-significant cultural resources.

Of these 23 well preserved agricultural sites, seven (14EW7, 14EW109, 14EW119, 14EW125, 14EW128, 14EW133 and 14EW137) have standing architectural components that may warrant a nomination to the National Register on architectural historical grounds. In addition, one of the sites that has been substantially destroyed has a relatively intact building that may have architectural significance. Two of these 8 agricultural sites with standing architecture, 14EW7 and 14EW119, were evaluated for their National Register significance during this project. As a result of this evaluation, standing architecture at both 14EW7 and 14EW119 was determined to be significant. The standing architecture at the six remaining sites was not evaluated during this project; such an evaluation is needed before the National Register significance of these sites can be properly assessed.

Bridges or Fords

A total of five bridges and one ford were inventoried during this project (14EW1-4, 14EW105, 14EW106, 14EW110, 14EW113, 14EW141). One of the bridges, 14EW105, and the ford, 14EW106, date to the mid-19th century. The four remaining sites, all bridges, date to the turn of the century or later.

The mid-19th century bridge (14EW105) and ford (14EW106) site were both evaluated for their National Register significance through non-testing approaches during this project. The bridge and a section of what is probably the Ft. Zarah Road leading to the site of the ford were found to be in excellent states of preservation. No evidence of the ford was found, however. The lack of observable physical remains of the ford (14EW106) indicates that it is not a National Register quality site. The bridge (14EW105), on the other hand, is associated with an historically important trail and the initial Euroamerican settlement of the area. It does not, therefore, appear to represent a redundant data resource and is felt to be eligible for inclusion on the National Register of Historic Places.

The four remaining sites in the type-category include one railroad bridge (14EW110) and three secondary road bridges (14EW104, 14EW113, and 14EW141). 14EW141 was destroyed, and is represented by only fragmentary remains. It is therefore not felt to be significant. The railroad bridge and secondary road bridges 14EW104 and 14EW113 represent iron truss bridges of the most common type. While these bridges are all in everyday use and are relatively well preserved, their common form makes them redundant cultural resources in the region, and they are not felt to be significant for inclusion on the National Register.

Civic Sites

A total of four sites with civic functions were inventoried during this project (14EW103, 14EW130, 14EW131, 14EW134). These included the Farisville Post Office, 14EW103, which has been discussed above as a non-significant cultural resource. A second site with a civic function is a possible early site of the Venango Post Office, 14EW130. This site is located outside of government property, and its significance will not be considered here. The two remaining sites include a standing school building, 14EW131, and the possible site of a 19th century school, 14EW134.

Site 14EW131 is characterized by a well preserved, one-room school house built at or before the turn of the 20th century. The school building was the only features observed at this site. While it is probable that this school house is architecturally typical and therefore redundant, this should be assessed by an architectural historian prior to any determination of its National Register significance. Further, the possibility that this school is associated with an event or person of unusual historical importance exists, and must be evaluated by further, site-specific historical research prior to any determination of the site's significance.

Regardless of the significance of site 14EW131, it is suggested that this building could be preserved relatively easily, and could be relocated and used profitably at the government's project office to house interpretive exhibits on the history and prehistory of the Kanopolis area.

Site 14EW134 is characterized by potentially early foundation remains of a school. While these remains have been impacted to a limited extent by more recent use as a farmstead and construction of a county road through the site, there could be a level of archaeological integrity in remaining parts of the site. The degree of archaeological integrity nevertheless needs to be verified at this site due to potential disturbance from a number of processes. Despite suggestions from a historical plat that 14EW134 may represent a 19th century school, specific identity, age, and function also remain unverified. Prior to the conduct of site specific historical and archaeological research on this site, it should, however, be considered as potentially significant.

Dugouts, Unknown Function

Three sites characterized by dugout features were inventoried during this project, but their function remains problematical. No determination of the significance or potential significance of these sites, 14EW120, 14EW123, and 14EW129, is possible without additional information on their function. This information can best be developed, we believe, from detailed, site-specific historical research, which can also assess whether these sites are associated with unusual historical importance. Due to the low visibility of the archaeological characteristics of dugouts, it is felt that limited archaeological testing will be needed before the meaning and significance of these sites will be fully and properly understood.

It is suspected that these are the sites of general agricultural settlements similar to those discussed above. If this is the case, their apparent sole architectural reliance on dugout buildings sets them apart from these other agricultural settlements, and the relative rarity of these sites may enhance their importance.

19th Century Scatters

Historic scatters are defined by the presence of artifacts, generally exposed in cultivated fields, and the absence of any observed architectural features. Three scatters with artifacts associated with the 19th century were inventoried during this project, and include 14EW118, 14EW130, and 14EW151. One of these sites, 14EW130, is also characterized by a substantial if not predominant 20th century component. Site 14EW130 is located outside of government property, and, as a result, its significance will not be considered here.

While each containing a small quantity of late 19th or 20th century material, these collections are characteristically 19th century in nature. Both appear to be consistent with a mid-19th century date, making them some of the earliest sites inventoried in the project area.

Site 14EW151 is, however, located outside of government property, and its National Register significance will not be considered here.

The function of 14EW118 is unknown, and additional historical and archaeological research is called for before a determination of its significance can be made. Considering the probable early age of this site, archaeological research may be more useful than historical research in defining its function. In that this site is located within a cultivated field, archaeological research is further called for to investigate the integrity of this site, that is, to determine if intact subsurface features or undisturbed cultural deposits exist. Based on the early date of this site and uncertainties as to its function and integrity, this site is recommended as a potentially significant cultural resource.

20th Century Scatters

Three 20th century artifact scatters were inventoried during this project (14EW10, 14EW107, 14EW130). One of these is 14EW130, which also contains 19th century materials and is discussed above. This site is located outside of government property, and its significance will not be discussed here. Two additional 20th century scatters were inventoried, including 14EW10 and 14EW107. Site 14EW10 was previously recorded because of a prehistoric component present at this site. The site is a small, low-density scatter contained entirely within a cultivated field. Considering its 20th century date and its degradation of integrity from cultivation, this site is not felt to represent a significant cultural resource. Site 14EW107 is also present in a cultivated field, and contains relatively recent materials in a fairly low frequency. Its recent age and degradation of integrity from cultivation lead us to recommend this site as a non-signifanct cultural resource.

Historic Trails

Three sites associated with historic trails were inventoried during this project (14EW105, 14EW106, 14EW153). These include a section of the Smoky Hill Trail/Denver Express Road (14EW153), a section of the Fort Zarah Road/Santa Fe Trail leading up to the Smoky Hill bridge (14EW105), and a section of the Fort Zarah Road/Santa Fe Trail leading up to the Smoky Hill Ford (14EW106). All three of these sites were evaluated using non-testing strategies. Of these, 14EW153 and 14EW105 are felt to be significant and eligible for the National Register of Historic Places due to their excellent preservation and clear historical importance. Although having historical importance equal to that of 14EW105 and 14EW153, site 14EW106 is not felt to be sufficiently well preserved to warrant a nomination to the National Register.

Agricultural Equipment/Non-Building Features

Two sites are considered within this category (14EW135, 14EW154). The first, 14EW135, is an isolated find of agricultural equipment. This equipment, a wood and iron hay-stacker, represents an unusual type of equipment on the landscape. While it is not felt that such isolated finds of agricultural equipment warrant nomination to the National

Register, it is felt the rarity of this equipment deserves preservation in much the same way that a utility wagon discovered on government property is currently being preserved at the Corps of Engineers' Kanopolis Lake project office.

The other site in this category consists of a rock-wall corral at site 14EW154. This corral was evaluated for its National Register significance by a non-testing approach during this project. Although apparently once associated with a settlement of disputed function, this settlement is now inundated by Kanopolis Lake. By itself, the rock-wall corral is not felt to be sufficiently significant to warrant nomination to the National Register. Furthermore, the significant information concerning this site is preserved as a result of this project, namely information on the location, configuration, and construction of this feature.

Miscellaneous Sites

Two sites were inventoried during this project that did not fit into other site-type categories (14EW139, 14EW150). The first of these is a cave shelter, 14EW139, allegedly used to house early settlers to Ellsworth County. This site was tested archaeologically during this project, and no evidence of its cultural use was found beyond some turn of the century graffiti on the nearby sandstone bluffs. The lack of evidence of significant cultural use of this site led to the conclusion that it was not eligible for inclusion on the National Register.

The other site in this category, 14EW150, consists of an isolated Dakota sandstone foundation situated on a knoll in the uplands. No evidence of the function of this site was discovered, although it appears to be well preserved archaeologically. This site can only be considered as potentially significant pending the results of further, site-specific historical research and archaeological testing.

Cemeteries

Only one cemetery was inventoried during the Kanopolis Lake project (14EW130). This cemetery is a component of site 14EW130, and is located outside of government property. Since this site is located outside of government property, no consideration of its National Register significance will be attempted.

Agricultural Outbuildings

Only one site, 14EW138, was found that could be associated with a non-settlement agricultural function. This site consists of a shed, well, and an unknown feature, all of relatively recent age. While this site type was rare in the survey, it is felt that this rarity is probably an artificial result of biases in our sources of data for identifying potential sites. Based on this and the relatively recent age of this site, it is not sufficiently significant to warrant nomination to the National Register of Historic Places.

Military Sites

Only one military site, 14EW26, was inventoried during this project. 14EW26 represents the site of Fort Ellsworth, and was subjected to archaeological testing during this project. While the historical importance of this site is clear, archaeological research at this site has been unable to document a level of archaeological integrity or importance sufficiently strong to support National Register nomination for this site.

Summary

A total of 53 historical archaeological sites were inventoried during this project. These included 11 sites that were evaluated for their National Register significance through archaeological testing and non-testing programs. The other 42 sites were not specifically evaluated during this project, and knowledge of them is restricted to survey level information.

Regardless of the level of data available about these sites, each has been subjected to an analysis of its significance for inclusion on the National Register of Historic Places. The strength of the conclusions varies considerably. Consideration of the significance of these 53 sites has led us to the conclusion that four are significant (i.e., eligible for nomination to the National Register, 20 are not significant, and 28 are potentially significant (i.e., neither significant or not significant) (Table 17). The significance of two sites (14EW130, 14EW151) were not considered during this project because they are located outside project lands.

Sites recommended as potentially significant lack the information needed for a decisive determination of National Register eligibility. In most cases, this deficiency is in site-specific historical research. For the large number of agricultural settlements inventoried, for example, it has been possible to establish a general level of archaeological redundancy, but, lacking site-specific historical research, it is not possible to state whether or not they are significant. In other cases, however, both the historical and archaeological importance of a site is in question, a situation which can usually only be resolved through traditional archaeological site testing.

Consideration of the National Register significance of a wide range of 19th and 20th century sites has led to several conclusions concerning the most effective approach to National Register evaluations. Essentially, it is felt that evaluations of historic sites such as those considered here should proceed through three distinct stages, including intitial survey identification and recordation, site-specific historical research, and traditional archaeological testing. It is suggested that the separation of this process into these three distinct phases rather than the two traditionally recognized (survey and testing), a substantially smaller number of sites will need to be subjected to actual archaeological testing.

At the survey level, sites which are clearly destroyed can be excluded from further consideration, and sites can be provisionally ranked into site-types allowing a consideration of the rarity or redundancy of a resource. At the site-specific historical research phase, site-type classifications can be verified and sites which have been identified as archaeologically redundant can be eliminated from further consideration if no outstanding level of historical importance can be established. Sites with a demonstrably high integrity of preservation and clear archaeological or historical importance need not be tested archaeologically. Essentially, due to a greater access to information about historic sites from non-archaeological sources, traditional archaeological testing can be largely restricted to those for which questions of site integrity and questions of overall site type/function exist.

Table 17. Summary of status of determinations of National Register significance of inventoried Historic period cultural resources.

Site Number	Site Type*	National Register Significance	Justification
14EW7	AS	Significant	Important standing architecture
14EW10	S20	Not Significant	Poor integrity and recent age
14EW26	M	Not Significant	Questionable integrity, Outstanding historical significance
14EW103	AS/C	Not significant	Poor data clarity, redundant resource type
14EW104	BF	Not significant	Redundant resource type
14EW105	BF/HT	Significant	Good integrity, clear historical importance
14EW106	BF/HT	Not Significant	Poor integrity, Clear historical importance
14EW107	S20	Not Significant	Poor integrity and recent age
14EW108	AS	Potentially Significant	Good integrity, redundant archaeology, unknown historical importance

(continued)

Table 17 continued. Summary of status of determinations of National Register significance of inventoried Historic period cultural resources.

Site Number	Site Type*	National Register Significance	Justification
14EW109	AS	Potentially Significant	Good integrity, redundant archaeology, unknown historical importance
14EW110	BF	Not Significant	Redundant resource type
14EW111	AS	Potentially significant	Good integrity, redundant archaeology, unknown historical importance
14EW112	AS	Not significant	Poor integrity
14EW113	BF	Not significant	Redundant resource type
14EW114	AS	Potentially significant	Good integrity, redundant archaeology, unknown historical importance
14EW115	AS	Potentially significant	Good integrity, redundant archaeology, unknown historical importance
14EW116	AS	Potentially Significant	Good integrity, redundant archaeology, unknown historical importance
14EW117	AS	Potentially Significant	Good integrity, redundant archaeology, unknown historical importance
14EW118	S19	Potentially Significant	Earlier site, unknown function, unknown archaeological importance
14EW119	AS	Significant	Good integrity, significant archaeology, unknown historical importance
14EW120	D	Potentially Significant	Good integrity, unknown archaeological and historical importance

(continued)

Table 17 continued. Summary of status of determinations of National Register significance of inventoried Historic period cultural resources.

Site Number	Site Type*	National Register Significance	Justification
14EW121	AS	Potentially Significant	Good integrity, redundant archaeology; unknown historic importance
14EW123	AD	Not Significant	Poor integrity
14EW127	D	Potentially Significant	Good integrity, unknown archaeological and historical importance
14EW124	AS	Potentially Significant	Good integrity, redundant archaeology; unknown historic importance
14EW125	AS	Potentially Significant	Good integrity, redundant archaeology; unknown historic importance
14EW126	AS	Potentially Significant	Good integrity, redundant archaeology; unknown historic importance
14EW127	AS	Potentially Significant	Good integrity, redundant archaeology; unknown historic importance
14EW128	AS	Potentially Significant	Good integrity, redundant archaeology; unknown historic importance
14EW129	D	Potentially Significant	Good integrity, unknown archaeological and historical importance
14EW130	C/S19/ S20/CEM	Not Considered	Outside project lands
14EW131	C	Potentially Significant	Good integrity, standing architecture, unknown historic importance.
14EW132	AS	Potentially Significant	Good integrity, redundant archaeology; unknown historical importance

(continued)

Table 17 continued. Summary of status of determinations of National Register significance of inventoried Historic period cultural resources.

Site Number	Site Type*	National Register Significance	Justification
14EW133	AS	Not Significant	Poor integrity
14EW134	C	Potentially Significant	Good integrity, unknown archaeological and historic importance
14EW135	AE	Not Significant	Isolated find of agricultural equipment
14EW136	AS	Potentially Significant	Good integrity, redundant archaeology; unknown historic importance
14EW137	AS	Potentially Significant	Good integrity, redundant archaeology; unknown historic importance
14EW138	AO	Not Significant	Redundant resources, recent age
14EW139	Misc.	Not Significant	No evidence of significant cultural use.
14EW140	AS	Not Significant	Poor integrity
14EW141	BF	Not Significant	Poor integrity
14EW142	AS	Not Significant	Poor integrity
14EW143	AS	Not Significant	Poor integrity
14EW144	AS	Not Significant	Poor integrity
14EW145	AS	Potentially Significant	Good integrity, redundant archaeology; unknown historical importance
14EW146	AS	Potentially Significant	Good integrity, redundant archaeology, unknown historical importance
14EW147	AS	Potentially Significant	Good integrity, redundant archaeology, unknown historical importance

(continued)

Table 17 continued. Summary of status of determinations of National Register significance of inventoried Historic period cultural resources.

Site Number	Site Type*	National Register Significance	Justification
14EW148	AS	Not Significant	Poor integrity
14EW149	AS	Not Significant	Poor integrity
14EW150	Misc	Potentially Significant	Good integrity, unknown archaeological and historic importance.
14EW151	S19	Not Considered	Outside project lands.
14EW152	AS	Potentially Significant	Good integrity, redundant archaeology, unknown historic importance
14EW153	HT	Significant	Good integrity, clear historic importance
14EW154	AE	Not Significant	Poor overall integrity, redundant resource with little information potential

*AS=Agricultural Settlement
BF= Bridge or Ford
C= Civic Site
D=Dugout-Unknown Function
S19=19th Century Scatter
S20=20th Century Scatter
HT=Historic Trail
AE=Agricultural Equipment/Non-Building Features
Misc=Miscellaneous Sites
CEM= Cemetery
AO=Agricultural Outbuildings

RESULTS OF NATIONAL REGISTER EVALUATIONS

A central part of this project involved the testing and non-testing evaluation of 11 historical archaeological sites for their eligibility (significance) for inclusion on the National Register of Historic Places. Of these 11 sites, seven were to be evaluated through programs of archaeological testing, and four through programs of non-testing evaluation. This non-testing evaluation involved the documentation of the presence and integrity of the physical remains of these sites, the mapping of these remains, and a consideration of their historical importance.

The sites that were selected for this non-testing evaluation were a government bridge across the Smoky Hill River (14EW105), a ford across the Smoky Hill River (14EW106), the Fort Zarah or Santa Fe road as it crosses Lake Kanopolis project lands (14EW105 and 14EW106), and the government owned portions of the Smoky Hill Trail or Denver Express Road (14EW153). In general, archaeological testing of these types of sites can be considered as unproductive of the type of information needed for a National Register evaluation.

The sites that were selected for evaluation through archaeological testing were the sites of the Black Ranch (14EW119), the Farisville Post Office (14EW103), the Faris Caves (14EW7), Fort Ellsworth (14EW26), the Millett Ranch (14EW152), the alleged stage stations or homestead dwellings on Horsethief Creek (14EW154), and a cave shelter in Red Rock Canyon supposedly used to house early homesteaders (14EW139). These sites are all, at least reportedly, loci of extended settlements of the sort which are amenable to testing through archaeological means. Testing at these sites generally involved the mapping of the site, delimitation of site limits, and the excavation of several test pits within the site to define site integrity.

The following discussions of the National Register evaluation of 11 sites at Lake Kanopolis review both the archaeological and historical record in an attempt to define the area of a site's importance, whether this importance is sufficiently great to warrant nomination to the National Register, and whether the physical remains of the site preserve this importance in the way required for a listing on the National Register.

14EW7, The Faris Caves

The Faris Caves site is one of the more intriguing sites within the Kanopolis project area, and represents an important local landmark. In his 1947 report on the historical aspects of the Kanopolis reservoir, Mattes describes this site as "three cave dugouts in sandstone cliff, used as residence and schoolrooms by early homesteaders sometime after 1870, on the Hudson farm" (Mattes 1947:2). Mattes' survey uncovered little information on this site, and he concluded that its importance

was not as the site of a significant historical event but rather as a site representative of the early settlement of this part of Kansas (Mattes 1947:24). G.A. Atwood had the original land patent on the site until he sold the land to J.H. Fairbanks in 1876. It was subsequently sold to Charles Griffee who sold the site to the Faris brothers in 1893.

Site 14EW7 is situated on the left bank of the Smoky Hill River, between the river's bank and a high bluff of Dakota sandstone to the east. This site was originally recorded not because of its historical archaeological remains but rather because American/Indian rock art was discovered on the sandstone bluffs at this site (Leaf 1977).

The Faris Caves are named after the Faris family, who represent some of the earliest settlers of Ellsworth County and who owned the site after 1893. This land was apparently originally owned by G. A. Atwood but its second owner, Charles Griffee, is attributed with the construction of the caves there. These caves were carved from a Dakota sandstone bluff at the site, and were apparently used by Griffee as a residence (Figure 11). In 1893, William and Winfield Faris purchased the tract on which the Faris caves are located. In 1899 and 1900, the southernmost of the three caves, which was heated by a fireplace carved into its sandstone walls, was used as a schoolroom for Winfield Faris' son Robert and for two daughters of neighbor Mel Straley (Figure 12). The northernmost of the three caves, which is stuccoed on the inside, has a spring running through it and was used as a milk house - the cool spring waters served to keep the milk cool.

Although it is uncertain when they were constructed, 14EW7 is also characterized by the remains of a large house and outbuilding located between the caves and the Smoky Hill River, just below the edge of the second terrace. Also not mentioned in the literature is the extent to which the sandstone bluffs at 14EW7 have been used for historic "graffiti". The area around and to either side of the caves is covered with hundreds of carvings, generally names and dates, which range in age from the turn of the century to the present in addtion to prehistoric Indian petroglyphs.

Our archaeological evaluation of this site involved both the caves and the associated sandstone structures, and resulted in the mapping of the site and the excavation of two one by one m test pits and several auger cores within the site limits (Figures 13-17). Mapping of this site revealed its primary, observable cultural components to consist of three cave-rooms in a sandstone bluff and two Dakota sandstone foundations.

The three caves include two similarly sized rooms on the south which are connected by a short passageway and a third room to the north. The room to the north is stuccoed on the inside, and was reportedly used as a milk house at some time. Its floor is lower than the other two caves and, at the time of our project, its door was almost completely filled in and the interior of the room was filled with water from the spring which flows through the room. The two connected caves were both open, relatively dry, and could be easily entered during our survey.

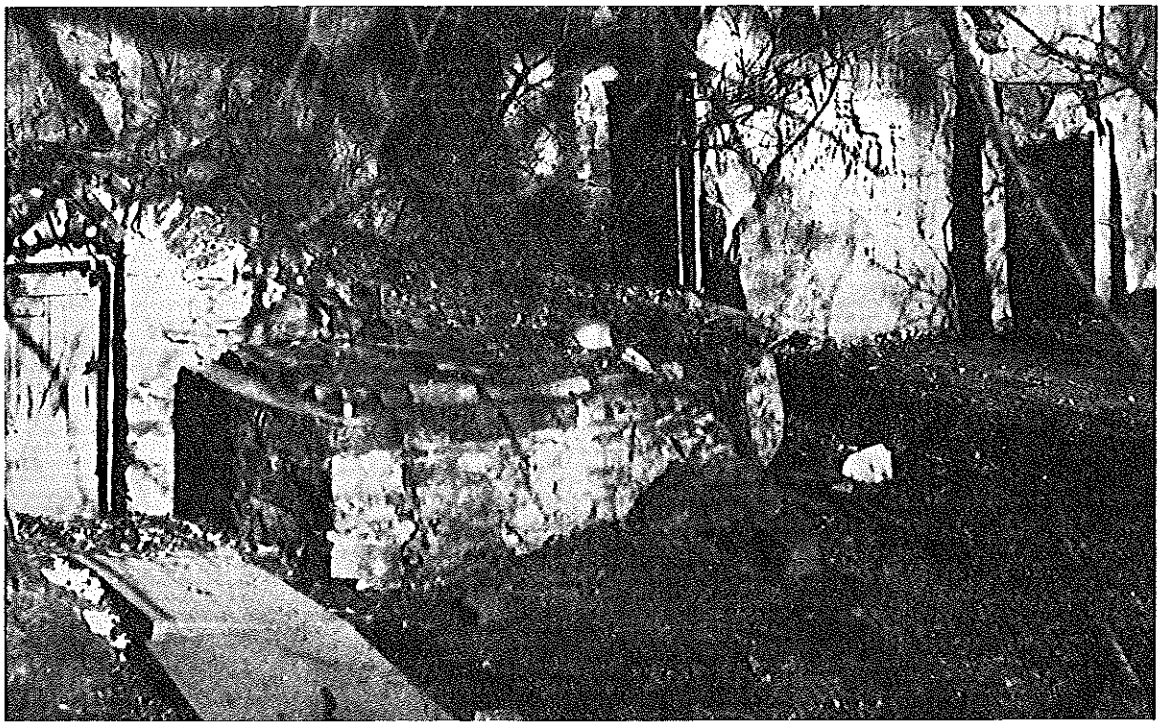

Figure 11. View of Faris Caves (14EW7) in 1947 (Courtesy of Kansas State Historical Society).

Figure 12. School being held in Faris Cave (14EW7 about 1900 (Courtesy of Kansas State Historical Society).

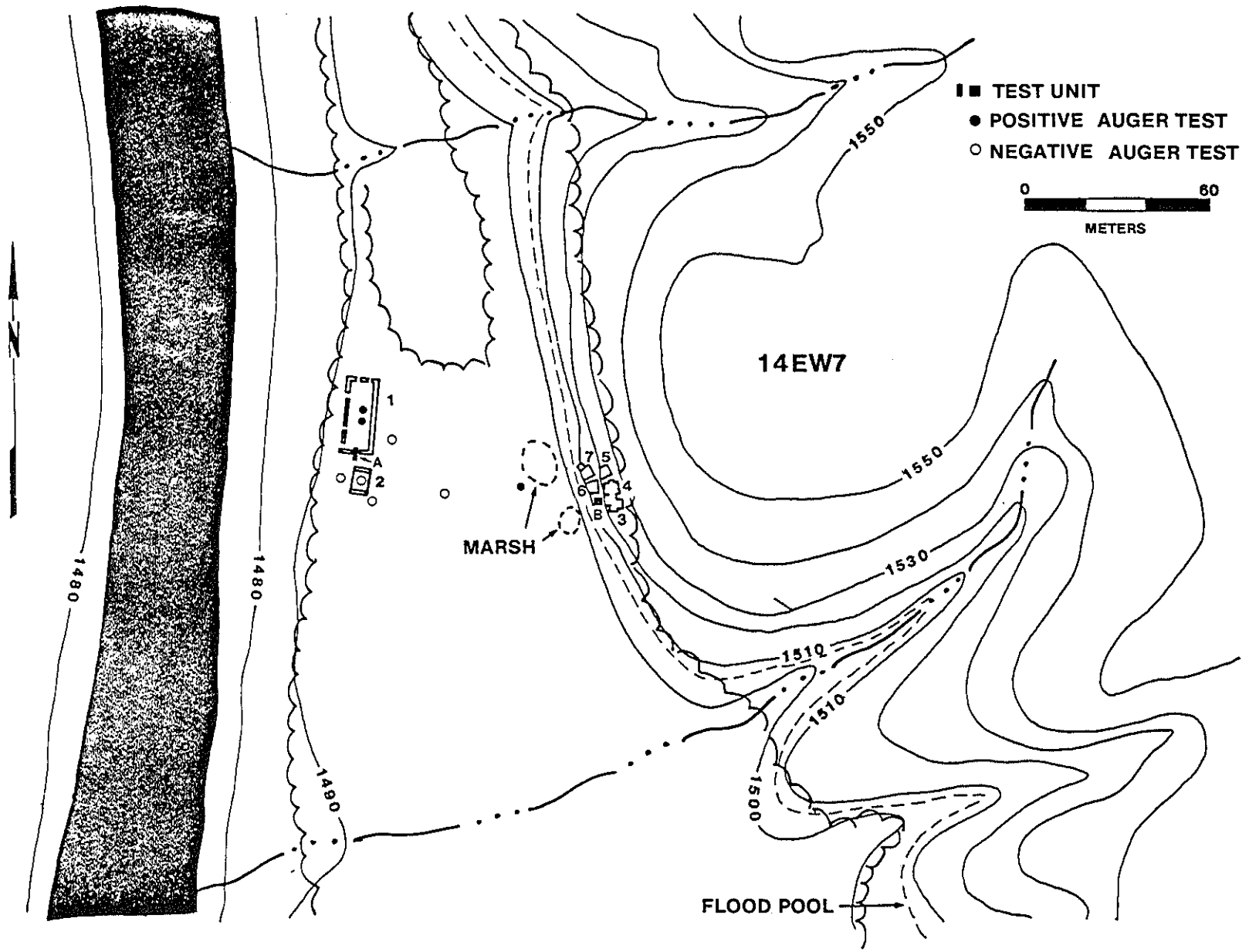

Figure 13. Location and plan view of test excavations at 14EW7. Numbers refer to structures. Structures 1 and 2 are building foundations, structures 3, 4 and 5 are caves and structures 6 and 7 are masonary platforms.

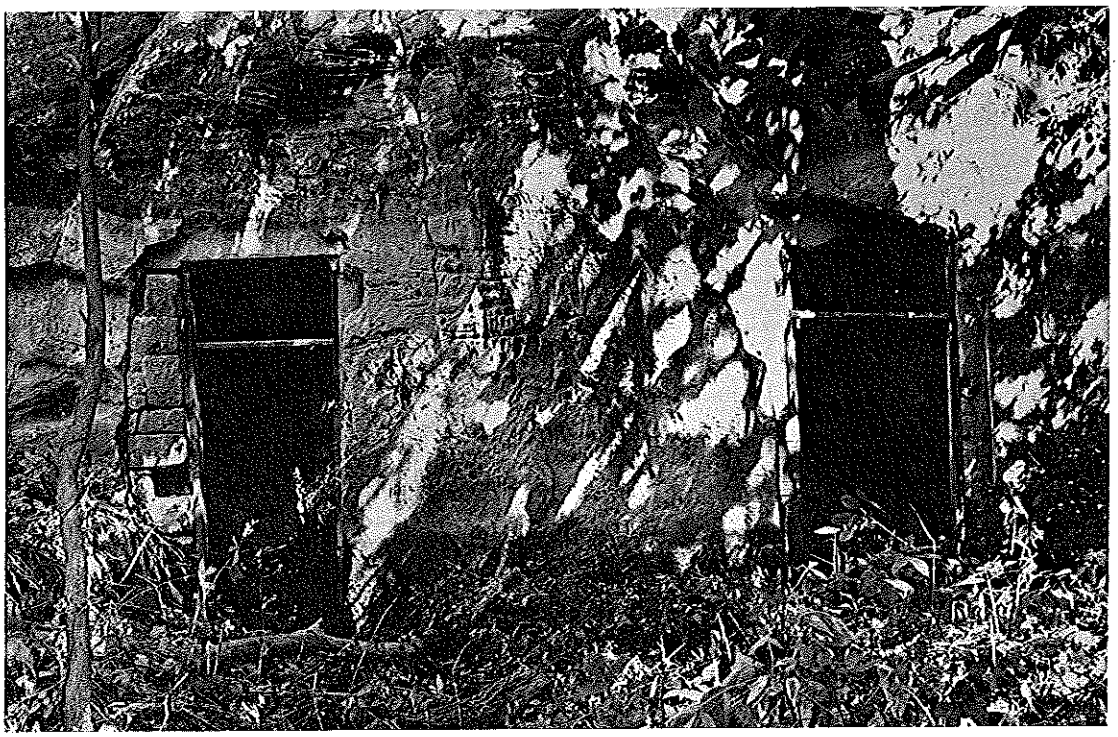

Figure 14. General view of 14EW7 during 1984 testing, entrances to caverooms 3 and 4.

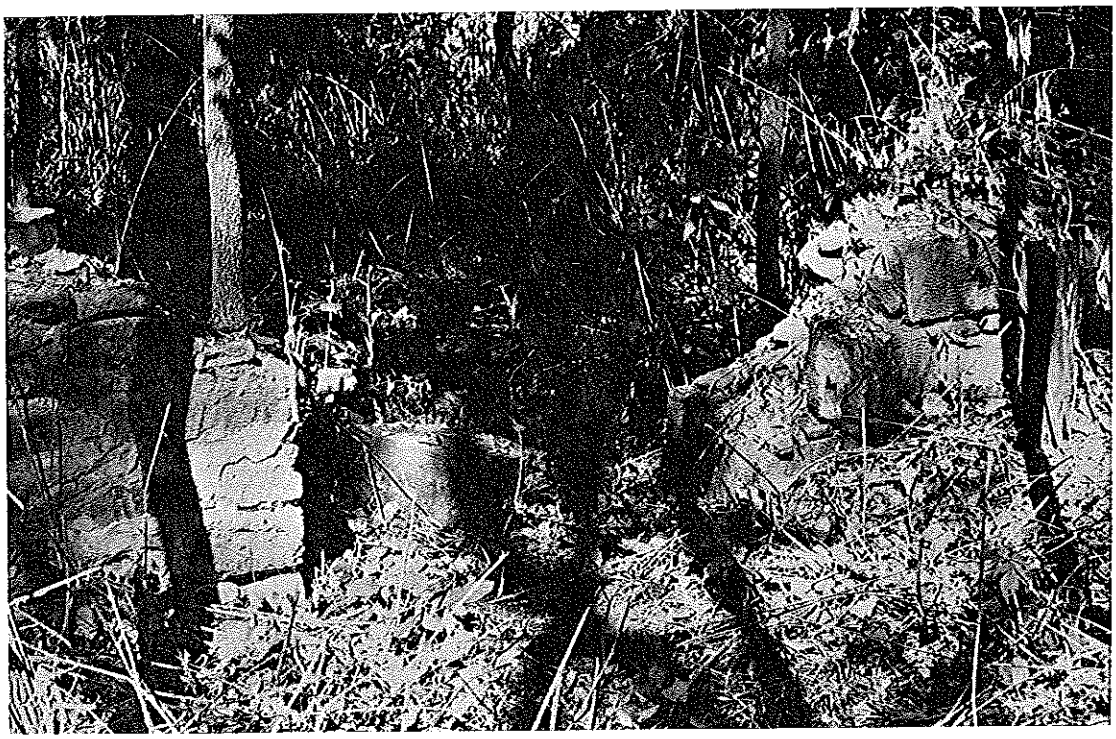

Figure 15. General view of 14EW7 during 1984 testing. View of doorway to structure 1.

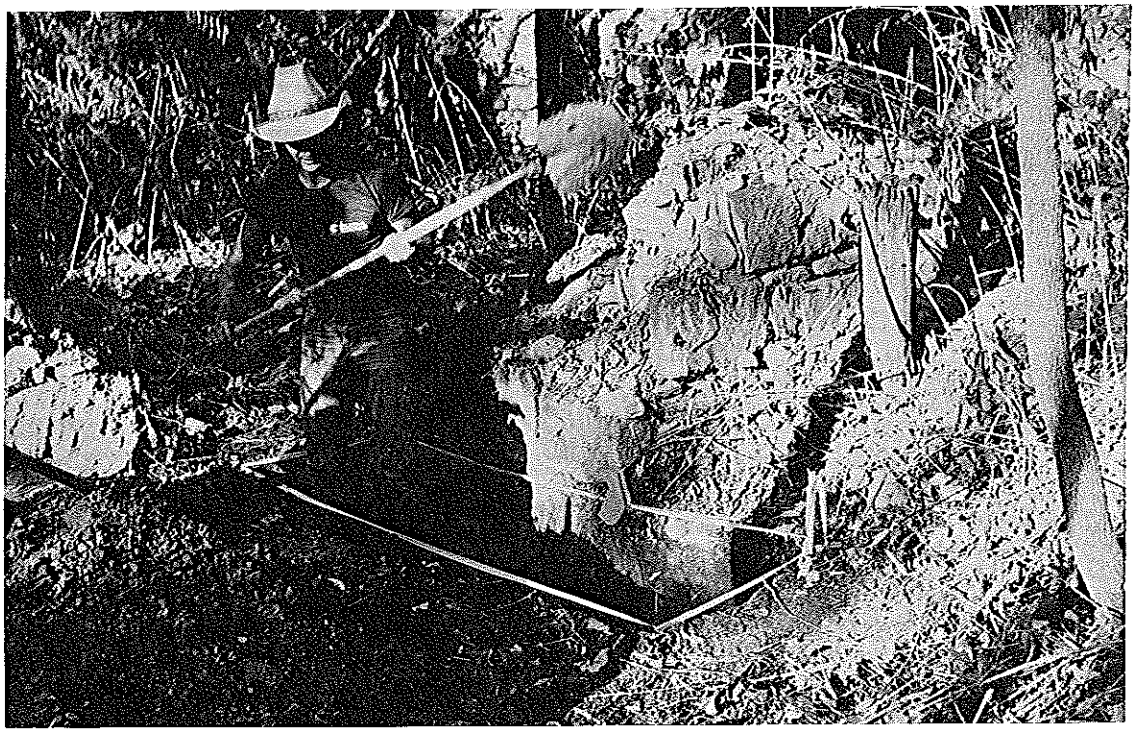

Figure 16. Test excavations in progress at 14EW7. Excavation of Test Unit A.

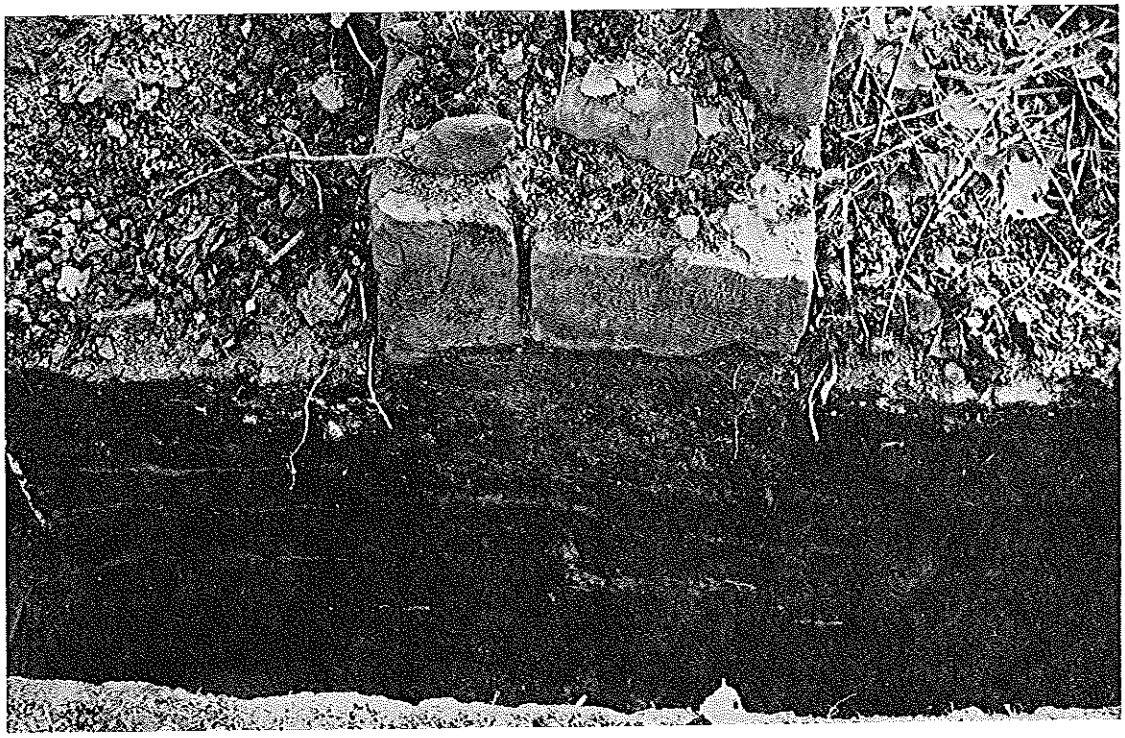

Figure 17. Profile of east wall of Test Unit A at 14EW7 showing laminated silts.

Local informants indicate that these caves are occasionally cleaned out by volunteer groups, apparently due to their great local popularity. The southernmost cave has a fireplace carved into its south wall, with a flue carved through the sandstone bluff. The central room had a shallow niche of unknown function carved into its north wall - possibly the start of a passage to connect it to the northernmost cave. This central cave also had a channel cut into its floor which was filled with water apparently flowing from a spring.

The area in front of the three caves had been landscaped at some point, with sandstone retaining walls enclosing an area of soil between the central and northern cave entrances and to the north of the northernmost cave. To the west of the caves were several small bogs, which apparently resulted from runoff from the springs observed running out of the caves. Local informants indicated that runoff from these springs had at one point flowed to the Smoky Hill River rather than remaining captive in bogs.

A test pit (Test Unit 2) placed near the door of the southernmost cave revealed a disturbed archaeological deposit characterized to a large extent by modern refuse including glass and plastic (Table 18). Artifacts in this unit were confined mainly to Levels 1 (0 to 10 cm) and 2 (10 to 20 cm), with very few artifacts occurring below 20 cm in Level 3. Although the material from this test unit was not overly diagnostic with respect to age, it did contain in Level 1 (0-10 cm) a wire nail, dating after the 1886 to 1900 period (Fontana and Greenleaf, 1902), and a steel based, plastic case shotgun shell. In Level 2 of this unit (10 to 20 cms) was found an unidentified plastic artifact and a clear glass "Presto" jar lid manufactured by an automatic bottle machine after about 1920 (Newman 1970).

Evidence of recent disturbances in the vicinity of these caves, and information on the periodic maintenance of these caves by locals suggests that the archaeological deposits in their vicinity may have been subjected to numerous disturbances. The constantly moist to wet conditions in front of these caves - clearly evident in all three levels excavated in Test Unit 2 - has probably led to further mixing of any site deposits, especially considering the constant recreational use of the site.

Table 18. Artifacts recovered from test units at 14EW7.

Depth	Catalog Number	Frequency	Description
TEST UNIT 1			
82 cm	1	1	Whole clear glass bottle, continuous thread closure, made by automatic bottle machine by Owens Glass Company

continued

Table 18 continued. Artifacts recovered from test units at 14EW7.

Depth	Catalog Number	Frequency	Description
81 cm	2	6	Articulating fragments of a white stoneware feeder marked with "Red Wing"/Ko-Rec Feeder/Pat. Applied For/ Made Only By The/Red Wing Union Stoneware Co./Red Wing, Minn./Set On A Level".
70-80 cm	3	4	Very rusted nails, possibly wire.
TEST UNIT 2			
0-10 cm	4	2	Fragments aqua window glass.
0-10 cm	5	4	Fragments of clear bottle glass.
0-10 cm	6	1	Wire nail.
0-10 cm	7	1	Cast iron stove grill.
0-10 cm	8	1	Miscellaneous metal bracket.
0-10 cm	9	1	Plastic sheath, steel base shotgun shell, unknown manufacturer.
0-10 cm	10	1	Piece of red rubber.
10-10 cm	11	2	Fragments of aqua window glass.
10-20 cm	13	1	Clear glass "Presto" jar lid, made by automatic bottle machine.
10-20 cm	14	1	Undecorated whiteware.
10-20 cm	15	1	Miscellaneous metal artifact.
10-20 cm	16	1	Miscellaneous metal artifact.
10-20 cm	17	1	Fragment of rusted tin.
10-20 cm	18	1	Fragment of wood from architecture.
10-20 cm	19	1	Unidentified plastic artifact.
20-30 cm	20	4	Clear bottle glass fragments.

(continued)

Table 18 continued. Artifacts recovered from test units at 14EW7.

Depth	Catalog Number	Frequency	Description
20-30 cm	20	14	Fragments of an aqua glass canning jar-probably all from the same jar and embossed fragments suggest it carried the logo "Mason's Patent Nov. 30th 1858".
10-20 cm	24	1	Aqua bottle glass.
10-20 cm		14	Fragments of aqua glass - probable canning jar, one fragment has some large embossing and one is a base. Fragments of clear bottle glass, all are embossed.
AUGER TEST 2			
50 cms	25	2	Highly corroded nails, probably wire.
55-60 cms	25	1	Highly corroded nail, probably a wire.

The two sandstone structures observed at this site are located due west of the three caves, and appear to be situated at the edge of the first terrace just below the edge of the second terrace. The eastern walls of these structures appear to have been built against the terrace edge. These buildings are both constructed of Dakota sandstone blocks, some of which have been dressed. Historical information cited earlier suggests that the larger of these two buildings was a residence while the smaller was an outbuilding.

The observable remains of these structures appears to consist of the relatively low ruins of sandstone walls. Evidence from a test pit (Test Pit 1) and auger cores excavated within the larger of these buildings shows, however, that the sandstone walls of this building and probably the smaller building to the south are probably largely intact, but that over half their height has been buried by recent sedimentation.

Two auger cores excavated within the interior of this large sandstone structure encountered what was apparently a flat stone at a depth of about one meter. The consistency of the depth of this stone in both auger cores suggested that it might represent a prepared flagstone floor of this structure. Of interest, these stones were overlain by a meter of bedded stream deposits largely composed of silts but also containing occasional lenses of white sand.

The results of these auger cores within this building prompted the excavation of a 2.0 m long by 50 cm wide (Test Unit 1) trench through a door in the south wall of the structure. This trench was placed so half would fall inside the building and half outside, and was placed against the sandstone wall so as to be able to monitor the depth of the wall. This trench contained few artifacts (see Table 18) and, as expected, at about one meter a prepared floor was encountered on the interior of the building.

The sandstone wall of this structure was observed to end slightly below the level of the prepared floor. On the exterior of the structure, a compacted sandy floor was encountered, and excavation for an additional 20 cm through this compact soil failed to encounter artifacts or features of any kind. As was observed with the auger cores, the deposits overlying the floor of this structure were a finely stratified, bedded stream deposit. The discovery of a floor one meter below the modern surface shows the remains of this building to be much more substantial than is apparent on the modern surface, with the walls being approximately 2 m high in places - probably their original height if this was a single story building.

Artifacts within Test Unit 1 were clustered at a depth of from about 70 to about 85 cm below the modern ground surface. These artifacts were notable for their depth and their relatively recent age. Of the six artifacts found in this test unit, four were extremely rusted nails. These appear to be wire nails, dating after the 1886 to 1900 period and probably after 1900 (Fontana and Greenleaf 1962). Another artifact was found at 82 cm below modern ground surfaceand is a clear glass bottle manufactured by the Owens-Illinois Glass Company with an automatic bottle machine. The automatic bottle machine was not in common use until after about 1920 (Newman 1970). The Owens-Illinois Glass Company was established in 1929, firmly placing the manufacture of this bottle after this date (Toulouse 1972:403). The final artifact found in this test unit, a "Red Wing Ko-Rec Poultry Feeder" made of white stoneware, could not be precisely dated by our research. All these artifacts were located directly within the bedded stream deposits which characterized this unit.

Obviously, the stratigraphic records of the areas tested by Test Units 1 and 2 was different. The topographic setting of these test units differed as well, with Test Unit 1 being located on a lower terrace than Test Unit 2. In order to define the stratigraphic relationships between these two areas, and to assess the potential of deeply buried deposits on the higher of the two terraces on which 14EW7 is located, two bucket auger tests were placed at 25 m intervals between Test Units 1 and 2.

In Auger Test 1, located 25 m east of Test Unit 1, a stratigraphic profile entirely different from that in Test Unit 1 was observed. It consisted of a series of broad bands of alternating silts and fine sands. While these strata appeared to be stream deposits, they were not as finely bedded or consistent as was observed in Test Unit 1.

In Auger Test 2, located 50 m east of Test Unit 1, a stratigraphic profile entirely different than that observed in Auger Test 1 or Test Unit 1 was observed. The profile in this auger test showed a series of alternating, broad bands of silts and fine sands. Of interest, three badly rusted nails, possibly wire, were found in this auger test at a depth of between 50 and 55 cm. While the stratigraphic profile of Auger Test 2 and Test Unit 1 differed greatly, both units revealed deeply buried, probably recent historic artifacts.

Three additional auger tests were excavated at 14EW7. These tests were excavated to investigate the nature of two observed depressions at the site, one circular and one rectangular, and to examine the interior fill of the smaller of the two sandstone foundations. The circular depression, located to the immediate south of the small sandstone foundation, proved to be a stump hole. The auger test in the rectangular depression provided no evidence that this depresssion was cultural in origin. The auger test excavated in the center of the smaller sandstone foundation was excavated to a depth of one m, but no cultural materials or prepared floor were encountered. It is important to note that the ground surface in this smaller foundation is higher than in the larger, possibly the reason that a prepared floor was not encountered in this auger test.

The presence of a meter of stream-lain deposits over the floor of a historic structure probably occupied as late as 1947 was very informative. The depth of this deposit can probably be explained as the result of three factors: the completion of the Kanopolis Dam in 1948, the floods of 1951 and 1957, and the location of this site within the upstream limits of the Kanopolis Lake at maximum (flood) pool. The flood of 1951 was perhaps the worst in recorded history, and was the only one that has "tested" the reservoir to date. Although not as severe as the flood of 1951, the flood of 1957 also stands out as one of the most severe in recorded history. Once the reservoir was filled with floodwaters, the 1951 and 1957 flood waters of the Smoky Hill would have entered the reservoir near 14EW7. The majority of the sediment load carried by these flood waters would have been deposited as soon as they were slowed by entrance into the impounded waters of Kanopolis Lake, or in the vicinity of 14EW7. The deposits observed at this site, therefore, may very possibly be largely the result of single flood episodes related to the 1951 and 1957 floods.

The implications of this for archaeological survey and testing within the Kanopolis Reservoir, and especially within the upper reaches of this reservoir on the low terraces of the valley, are perhaps significant. Sites recorded in these settings prior to 1951 may now be buried by as much as one meter of sediment, and may be difficult to relocate. Perhaps more critically, sites which were not recorded prior to 1951 may also be buried, and may not be visible using normal survey techniques.

In considering the National Register significance of the Faris caves site, 14EW7, only the historic component will be considered here.

This historic component appears to date from perhaps as early as the 1870s to as late as 1947. The function of this site during this period appears to have been as a farm/ranch settlement with short term use of part of the site as a school during 1899 and 1900. It must also be considered that this site is characterized by both standing architecture, the three caves, and buried archaeological deposits.

The standing architecture at 14EW7 is its most unusual characteristic, and has been the characteristic which has drawn attention to it (Mattes 1947). This architecture consists of three rooms carved out of a Dakota sandstone bluff, and which appears to have served variously as a residence, milk house, and school. This standing architecture is unusual, and its importance is its illustration of a particular architectural adaptation to local conditions. This form of architecture was unique at the sites examined during our survey and is probably extremely rare in the region. Its associtiion with the early settlement of the area and documented use as a school add to its importance. It is our opinion that the architecture and historical context represented by the three caves are potentially significant and warrant nomination to the National Register.

The balance of this site, consisting of the archaeological remains of a farm/ranch settlement appear to be disturbed and contain a major component of recent refuse. This area of the site may have contained information on certain specialized activities mentioned in historical sources, including use as a milk house and school, as well as evidence of the early occupation of the site. Archaeological information in this area is, however, not felt to be sufficiently well preserved to represent a viable and important source of data about site activities or about the early period of settlement at this site.

Much better preserved, perhaps, are the archaeological deposits associated with the two sandstone structures located between the caves and the Smoky Hill River. These deposits, however, are covered by a meter of recent alluvium, making their archaeological investigation difficult. Furthermore, these deposits appear to represent those of a generalized farm/ranch settlement spanning a period probably including the late 19th century to 1947. Such a long term occupation on a historic site results in an archaeological record with little clarity. Furthermore, late 19th century and 20th century farm/ranch settlements are common to the project area and beyond, and this site is probably best recognized as a redundant data source.

14EW26, Fort Ellsworth

The site of Fort Ellsworth, 14EW26, represents one of the earliest historical archaeological sites known to exist within the project area. It also represents the site that was the most difficult to evaluate during this project. The site of Fort Ellsworth has clear historical importance, and received considerable attention by Mattes in his 1947 report (Mattes 1947). 14EW26 received limited archaeological attention during Smith's 1948 work at Kanopolis (Smith 1949), when he visited the

site and made a small surface collection. This site was later visited by Leaf during his 1976 survey at Kanopolis Lake (Leaf 1976). During our project, this site was one of seven sites to be evaluated through a program of archaeological testing. The land records for this site are undated on the early owners, however, the U.S. government sold the land to Joseph Lehman and this is consistent with historical accounts of where Ft. Ellsworth was built originally.

Fort Ellsworth was established in August of 1864 as a result of a series of raids in Kansas by hostile Indians in the early 1860s. These raids resulted in the exodus of Euroamerican settlers from the Kanopolis area between 1862 and 1864 and Fort Ellsworth was established as one of a series of forts in Kansas designed to secure routes of transportation and communication such as the Smoky Hill Trail/Denver Express Road and the Fort Zarah/Santa Fe Road. Fort Ellsworth was situated at the juncture of these two important routes, and was specifically situated at the Smoky Hill crossing of the Fort Zarah/Santa Fe Road. The fort was established by troops of the 7th Iowa Calvary under the command of Second Lieutenant Allen Ellsworth. Fort Ellsworth remained in existence only until 1866, when it was replaced by Fort Harker (14EW155), located a short distance away in what is today the community of Kanopolis.

A review of the historical literature provides few detailed plans showing the location of Fort Ellsworth. Most, such as Frazer (1972) show the location of the fort on a state map of Kansas. Early historical accounts state that the for was built on the site by the Page and Lehmann Ranch at the site of the Smoky Hill crossing. Deeds and abstracts at the Ellsworth County courthouse indicate that Joseph Lehmann owned land on north sides of Spring Creek in Sections 35 and 36. The location of the fort was intensively investigated over a period of years by the late George Jelinek who excavated at several locations along the confluence of Spring Creek and the Smoky Hill River (Jelinek 1973). Francis Wilson, now president of the Ellsworth County Historical Society investigated the area along with Jelinek. He reports the location of the fort to be in the vicinity of the confluence of Spring Creek and the Smoky Hill River.

Our archaeological approach to Fort Ellsworth involved an intensive survey of the area surrounding the reported location of this site (Figures 18-19), and the excavation of five one by one m test units in several areas. Our examination of the Fort Ellsworth area resulted in the discovery of numerous artifact scatters containing materials contemporary in age to the occupation of Fort Ellsworth but none that were conclusive of a military occupation (Table 18). Our survey resulted in the identification of five localities in the vicinity of 14EW26, and all situated in areas previously reported as 14EW26 or that are felt to represent possible remains of Fort Ellsworth.

Locality I:

Locality I consists of a moderate density scatter of historic artifacts in cultivated and fallow fields on the left bank of a tributary of the Smoky Hill River (Figure 20). This locality was characterized by the highest density scatter of Fort Ellsworth period artifacts observed in the 14EW26 vicinity. Although not considered in

Figure 18. General view of 14EW26. Test excavations in progress at Locality III.

Figure 19. General view of 14EW26. View of Locality IV looking north.

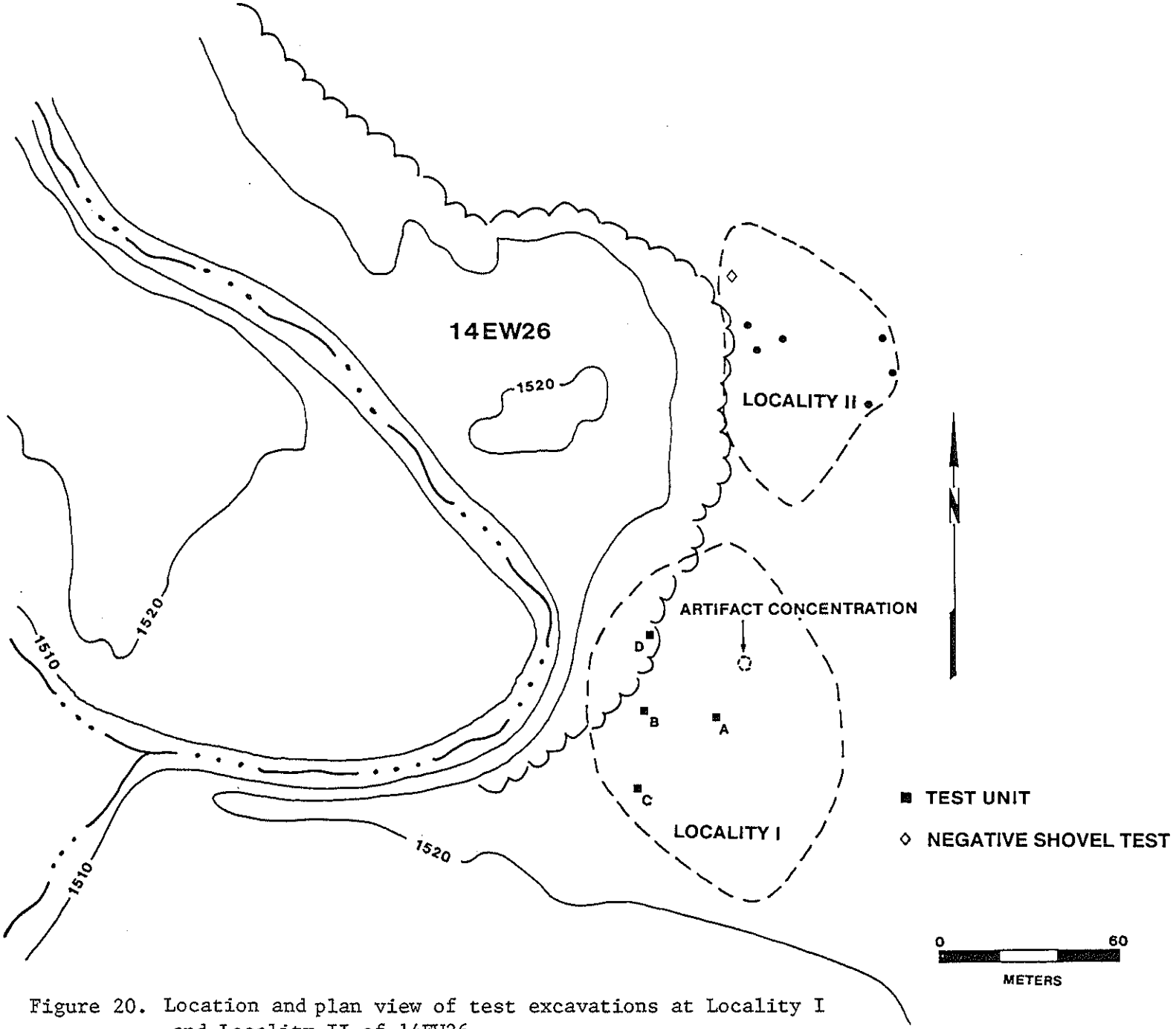

Figure 20. Location and plan view of test excavations at Locality I and Locality II of 14EW26.

this report, Locality I also is characterized by a fairly dense scatter of prehistoric lithic and ceramic artifacts. Since a substantial portion of this locality existed on project lands, it appeared to represent perhaps the most promising with respect to discovering intact remains of Fort Ellsworth through subsurface testing. As a result, four one by one m test units were excavated in this locality within the government boundary.

Artifacts collected from the surface of Locality I include a variety of artifacts which can be loosely associated with the 19th century, but none which can be assigned a definite military association (Table 18). Artifacts definitely indicating the 19th century nature of this locality include a machine cut nail, in use between about 1800 and about 1900 (Fontana and Greenleaf 1962); a four-hole, two piece iron trowser button of a type found on military and civilian sites of the mid to late 19th century (Lewis 1972); an aqua bottle finish with a mold seam reaching to only the base of the neck, indicating manufacture in a two-piece mold between 1845 and 1913 (Figure 21) (Newman 1970); and a number of fragments of olive bottle glass, including one kickup base, typical on sites dating within the first three quarters of the 19th century (Lewis 1972; Rourbaugh et al. 1971; Baugh 1970; Wycoff and Barr 1968).

The four test units excavated on project lands within Locality I produced a very small number of artifacts (Table 19). Like those from the surface, none of the artifacts from the test units could be assigned a definite military association. These artifacts are likewise of only minimal use in dating the site. Cut nails from Test Units A and B indicate use of the site during the manufacture of this type of nail, or between about 1800 and 1900. The olive bottle glass fragment found in the 20 to 30 cm level of Test Unit C suggests use of the site during the first three quarters of the 19th century.

Although a tight date is not forthcoming from the materials from Locality I, it is definitely 19th century in age. The types of artifacts present suggest that domestic functions were performed there, as is evidenced by bottle glass and ceramics, and that some form of buildings were present, as is evidenced by a relatively high frequency of window glass and by a few nails. Test Unit C appears to provide evidence of a specialized activity in the presence of a relatively high frequency of coal clinkers, possibly indicating a localized, specialized activity such as blacksmithing. Any of these functions could, however, be associated with Fort Ellsworth or with use of the Smoky Hill Trail/Denver Express Road or the Fort Zarah/Santa Fe Road.

Locality II:

This locality consists of a light density scatter of historic artifacts located in a cultivated field on the left bank of a tributary of the Smoky Hill River upstream from Locality I (See Figure 20). As was the case with Locality I, Locality II was also characterized by the

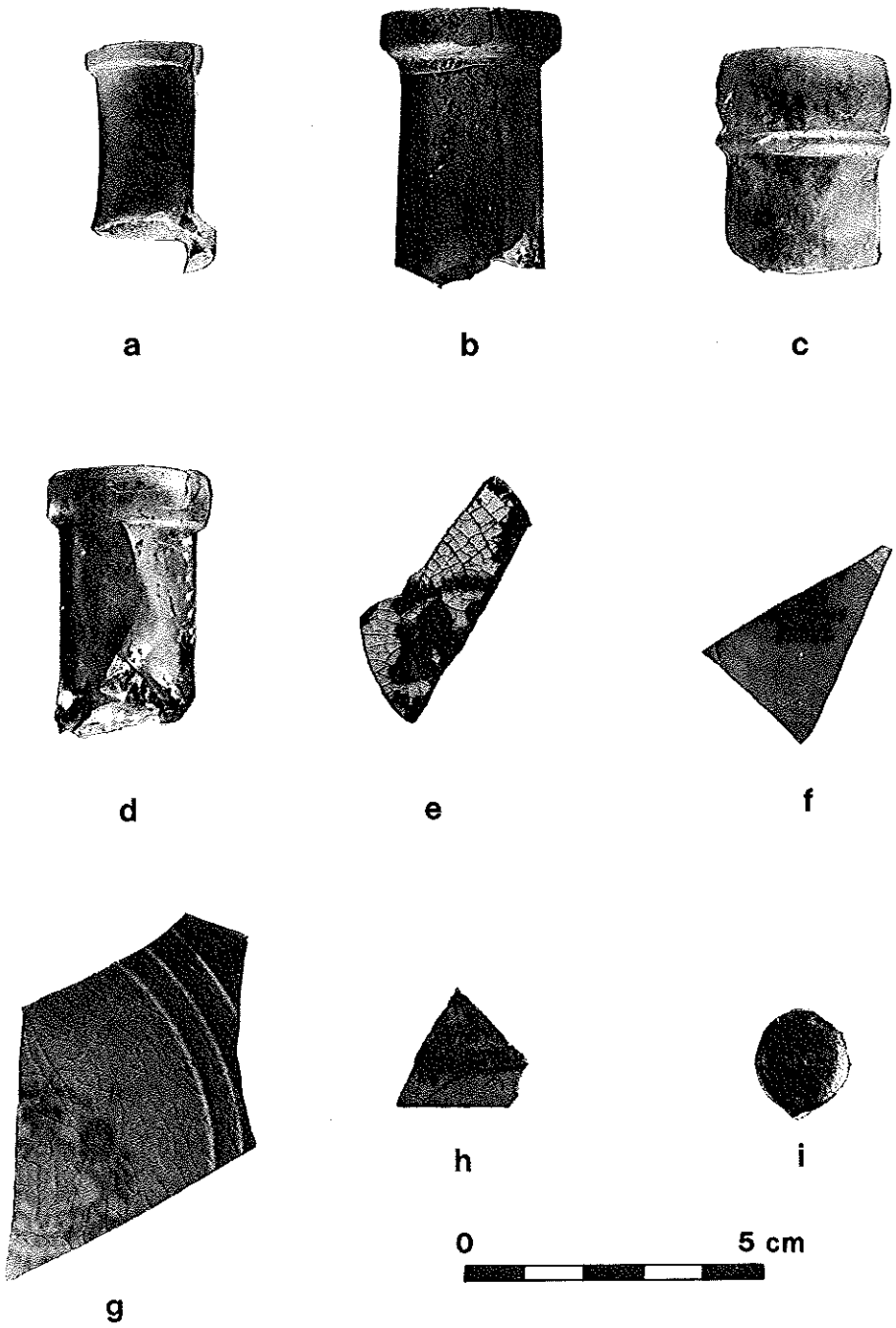

Figure 21. Artifacts recovered from 14EW26, 14EW103, 14EW118, 14EW143 and 14EW151: a, aqua bottle neck from 14EW26; b, aqua bottle neck from 14EW103; c, aqua bottle neck from 14EW118; d-f, amethyst bottle neck earthenware sherd and porcelain sherd from 14EW143; g-i, earthenware sherds and cartridge case from 14EW151.

presence of a scatter of prehistoric lithic and ceramic artifacts, not discussed in this report. Locality 2 is located entirely on private property adjacent to project lands.

In comparison to Locality I, artifacts within Locality II were exceptionally scarce. Collected artifacts include one coca-cola bottle fragment, of obvious recent age, and fragments of amber and olive bottle glass. The olive bottle glass is suggestive of a date in the first three quarters of the 19th century, and suggests in a very speculative way the contemporaneity of Localities I and II. No functional insights are possible based on the small collection from this area.

Locality III:

Location III is the location of one well defined dugout and possibly additional dugouts cut into the edge of a terrace on the right bank of a tributary of the Smoky Hill River (Figure 22). This dugout(s) is located on private property immediately adjacent to project lands. A one by one m test unit was excavated to a depth of 30 cm in front of this dugout on project lands, but failed to recover any cultural materials. Metal detector assisted survey in this locality failed to discover any cultural materials.

The well defined dugout observed at this locality was cut into the edge of a pronounced terrace edge. At the front of the dugout was a low mound of earth. Although very poorly defined, another possible dugout was noted along the terrace dge. Although the dugout(s) observed in Locality III is definitely cultural in origin, our archaeological research revealed absolutely no information which could associate this locality with Fort Ellsworth.

Locality IV:

Locality IV is the location of five well defined dugouts located on a hill slope overlooking and separated from the Locality IV dugout(s) (See Figure 22). This locality is situated entirely on private property. The five observed dugouts include two exceptionally large and three smaller dugouts. The only artifact observed at the locality was a machine cut nail, suggestive of a 19th century date for these features. This nail was discovered during metal detector assisted survey of this locality, no other artifacts were discovered in this fashion or by visual examination of the area.

Locality V:

This locality consists of a scatter of artifacts on a sand bluff on the left bank of the Smoky Hill River immediately west of a sand pit. Although no strongly diagnostic artifacts were observed at this locality, the few that were observed, including olive bottle glass, were clearly best associated with the 19th century. This locality is extremely sandy and has been severely eroded in many areas. A close inspection of all eroded areas revealed virtually no period artifacts, suggesting that the 19th century use of this area was ephemeral at best or that little in the way of intact archaeological deposits remain.

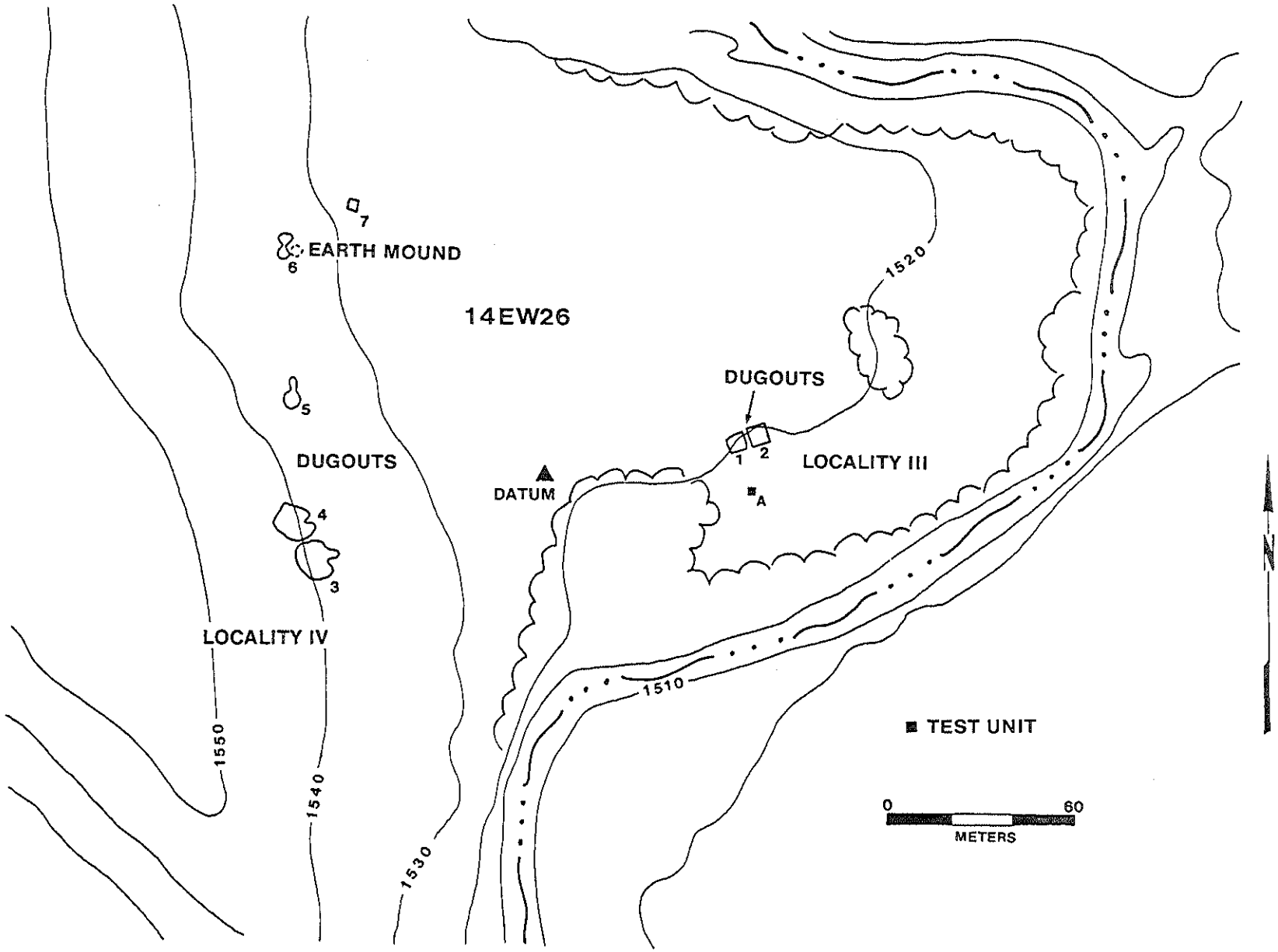

Figure 22. Location and plan view of test excavations at Locality III and Locality IV of 14EW26.

Considering that this low density scatter of artifacts is immediately adjacent to an active sand pit, it is possible that the materials observed at Locality V represent the peripheris of a largely destroyed site.

In considering the possible identity of Locality V, it is perhaps important that the 1866 General Land Office (GLO) map of the area shows a U. S. mail station at the approximate location. Considering the good visibility at the locality and the low density of 19th century materials observed, it would appear probable that had a substantial site such as a U. S. mail station been present there it has probably been destroyed during the operation of the adjacent sand pit.

Table 19. Historic artifacts collected at 14EW26

Locality	Catalog Number	Frequency	General Surface Description
1	1	7	Aqua window glass fragments.
2	2	1	Coca-Cola bottle fragment.
1	3	1	Aqua bottle finish, mold seam stops at base of neck.
1	4	1	Melted aqua bottle finish with an applied lip.
2	5	16	Undecorated whiteware sherds.
1	6	1	Fragment of an unidentified maker's mark on undecorated whiteware.
1	7	3	Three stoneware bottle sherds.
1	8	1	Machine cut nail.
1	9	1	Four-hole, two piece iron button.
1	10	1	Piece of lead.
1	11	1	Coal clinker.
		1	Tin can lid.
		1	Diamond shaped tin fragment with nail hole.
		2	Miscellaneous metal artifacts.
		7	Aqua bottle glass fragments.
		3	Amber bottle glass fragments.
		7	Olive bottle glass fragments, one is a ketchup bottle base.

Test Unit A

Level	Catalog Number	Frequency	Description
0-10 cm	14	1	Aqua bottle glass fragment.
10-20 cm	15	2	Aqua bottle glass fragments.
10-20 cm	16	1	Tin fragment.
20-30 cm	17	3	Aqua bottle glass fragments.
20-30 cm	18	1	Large d. cut nail fragment.

Test Unit B

Level	Catalog Number	Frequency	Description
0-10 cm	19	2	Clear bottle glass fragments.
0-10 cm	20	1	Square iron nut.
0-10 cm	21	1	Brick fragment.
0-10 cm	22	1	Machine cut nail.

Test Unit C

Level	Catalog Number	Frequency	Description
0-10 cm	24	1	Brick fragment.
10-20 cm	25	1	Aqua window glass fragment.
10-20 cm	26	1	Brick fragment.
10-20 cm	27	5	Coal clinkers.
20-30 cm	28	1	Olive bottle glass fragment.
20-30 cm	29	1	Unidentified metal artifact.
20-30 cm	30	20	Coal clinkers.

Test Unit D

Level	Catalog Number	Frequency	Description
0-10 cm	32	3	Aqua bottle glass fragments.
0-10 cm	33	1	Tin fragment.

10-20 cm	34	5	Aqua window glass fragments.
10-20 cm	35	3	Tin fragments.
		1	Unidentified metal artifact.
10-20 cm	36	1	Unidentified bone.
20-30 cm	37	4	Aqua window glass fragments.

The several scatters of artifacts documented in the Fort Ellsworth area may have resulted from the occupation of Fort Ellsworth or from the use of the Smoky Hill Trail/Denver Express Road and the Fort Zarah/Santa Fe Road. These roads converge at the site of Fort Ellsworth, and all the observed distributions can be associated with one of these roads. Lacking definite military items suggesting the military occupation of Fort Ellsworth, any of the observed distributions of artifacts could as easily be preferred camping locations along these roads.

These artifact distributions are all located along either the Smoky Hill River or a tributary of the Smoky Hill, logical overnight camp grounds for travelers on these trails. The proximity of these possible campgrounds to Fort Ellsworth and later to Fort Harker further enhances their attractiveness for use by travelers on these trails.

One area, including Localities III and IV, was identified during our survey which appeared to be a possible location of Fort Ellsworth based on historical references contained in Mattes (1947). This site, which is situated outside government property, is characterized by the remains of at least six and possibly more dugouts on a hillslope and terrace edge. The only artifact observed in association with these dugouts was a square cut nail - the type that would have been used at Fort Ellsworth. While it is probable that other artifacts are present at this site, which is in pasture, its location on private property precluded its testing. These dugouts could easily be the Fort Ellsworth described by Shoaf in 1938:

> Fort Ellsworth, in 1865, was the only settlement beyond Salina. It was a typical frontier outpost. The most imposing building there at the time was the Commissary's building, a sod house about 25 x 40 feet in size, overlooking the Smoky Hill River. The barracks and officer's quarters consisted of dugouts in the bank along the river front. No stockade of any sort surrounded the fort. It was the first and only settlement between Salina and Fort Zarah on the Arkansas River, and was a one company post (Shoaf, 1938 in Mattes 1947:13).

The dugouts observed at this site included two very large dugouts and a series of four smaller dugouts. Two of the smaller dugouts consisted of what appear to be two rooms connected by a short, narrow passageway. Five of the observed dugouts were located on the south slope of the most prominent hill in the area, which provides a generally excellent vantage of the vicinity. Another dugout, and several possible dugouts, were located at the base of this hill on the edge of a terrace along a tributary of the Smoky Hill River.

The National Register significance of the site of Fort Ellsworth is difficult to assess. Clearly, Fort Ellsworth possesses the level of historical significance to warrant a National Register nomination of its site. Although it is possible that dugouts observed during this project represent the remains of Fort Ellsworth, their location outside of government property made their testing inappropriate. If this is the site of Fort Ellsworth, its location in unbroken prairie makes its integrity of preservation a virtual certainty.

A number of loci in the general area, all of which appear to date to the period of Fort Ellsworth's occupation, could represent either the site of Fort Ellsworth or a campground along one of the area roads.

14EW103, The Farisville Post Office

The Farisville Post Office is one of several early civilian settlements in the Kanopolis project area that Mattes identified as "interesting" in 1947 (Mattes 1947:1-2). With several other of these sites, however, he cautioned that, because of the limited historic information available, "...the historic value of (this structure) lies in the fact that (it is) typical or representative of the early settlement period of central Kansas, rather than in any actual events with which (it) may be associated" (Mattes 1947:24). The National Register significance of this site was evaluated through a program of archaeological testing which resulted in the mapping of all observed features, the delimitation of the site boundaries, and the excavation of controlled test units within the site area.

The Farisville Post Office appears to have been established at some time prior to 1877, probably during the early parts of the resettlement of the Kanopolis area following the Indian hostilities of the 1860s. The Farisville Post Office appears to have served a dispersed community also known as Farisville, and was named for Henry V. Faris. Faris was one of the areas' earliest permanent settlers, arriving in Ellsworth County in 1860. The Farisville Post Office was apparently synonymous with the Faris residence, with Faris's wife serving initially as postmistress. Mail for Farisville was apprently routed through Fort Harker (Kanopolis) and was delivered once or twice a week.

Although no date exists in the land records, the original owner is listed as Henry Faris who eventually conveyed the land to Irvin and Emma Faris.

No buildings are shown at the location of 14EW103 on the 1875 plat of Ellsworth County. The 1887 plat identifies a building at this location as the Farisville Post Office. In 1901, this designation remains, but the ownership is listed as belonging to William F. Doan. Doan is listed as a farmer, stock raiser, and postmaster. On the 1918 plat, W. F. Doan is still shown as the owner of this land, and a building is still shown at 14EW103, but it is no longer listed as the Farisville Post Office. This would tend to suggest that this site ceased to function as a post office sometime between 1901 and 1918. In his 1947 survey report, Mattes described the Farisville Post Office as having recently burned (Mattes 1947).

The site of the Farisville Post Office is situated in a fallow area within a cultivated field (Figure 23). It is characterized by numerous architectural features, including a Dakota sandstone foundation, including cellar, probably representing the residence/post office (Feature 1) (Figure 23); a shaft well walled with Dakota sandstone (Feature 2); a concrete capped pump well (Feature 3); a Dakota sandstone foundation of what is probably an outbuilding (Feature 4) (Figure 24); a poured concrete foundation of an agricultural outbuilding (Feature 5); a poured slab-type foundation of what appears to have been a garage (Feature 6); and a small, poured concrete feature of unknown function (Feature 7). In general, these features suggest an occupation well into the 20th century; it is probable that the sandstone features represent the original buildings present in the 19th century with the poured concrete foundations resulting from continued occupation during this century.

The limits of 14EW103 were defined through surface survey in the cultivated field which surrounds the site. Historic artifacts were observed on all sides, suggesting that not all of the site was located in the fallow area. In general, however, the observed artifact distribution did not extend very far into the cultivated field, indicating that the vast majority of the site area was located in the fallow area of the field. In the cultivated field, artifact density was not high, a finding not uncommon to the periphery of a site.

Three one by one m test pits were excavated within 14EW103 to assist in a determination of the site's archaeological integrity. These test pits were placed in a north-by-south transect through the site, with a 25 m interval between each unit. These units fell adjacent to the west sides of the three main architectural features at this site, the Feature 1 and 4 sandstone foundations and the Feature 5 poured concrete foundation. Like the transect of test units, these foundations are aligned north-by-south and are spaced approximately 25 m apart. In addition to these three one by one m test units, a 50 cm deep shovel test was excavated in the cellar depression of the Feature 1 foundation.

Figure 23. General view of 14EW103, structure 1 basement foundation.

Figure 24. General view of 14EW103 partially covered wall of structure 4.

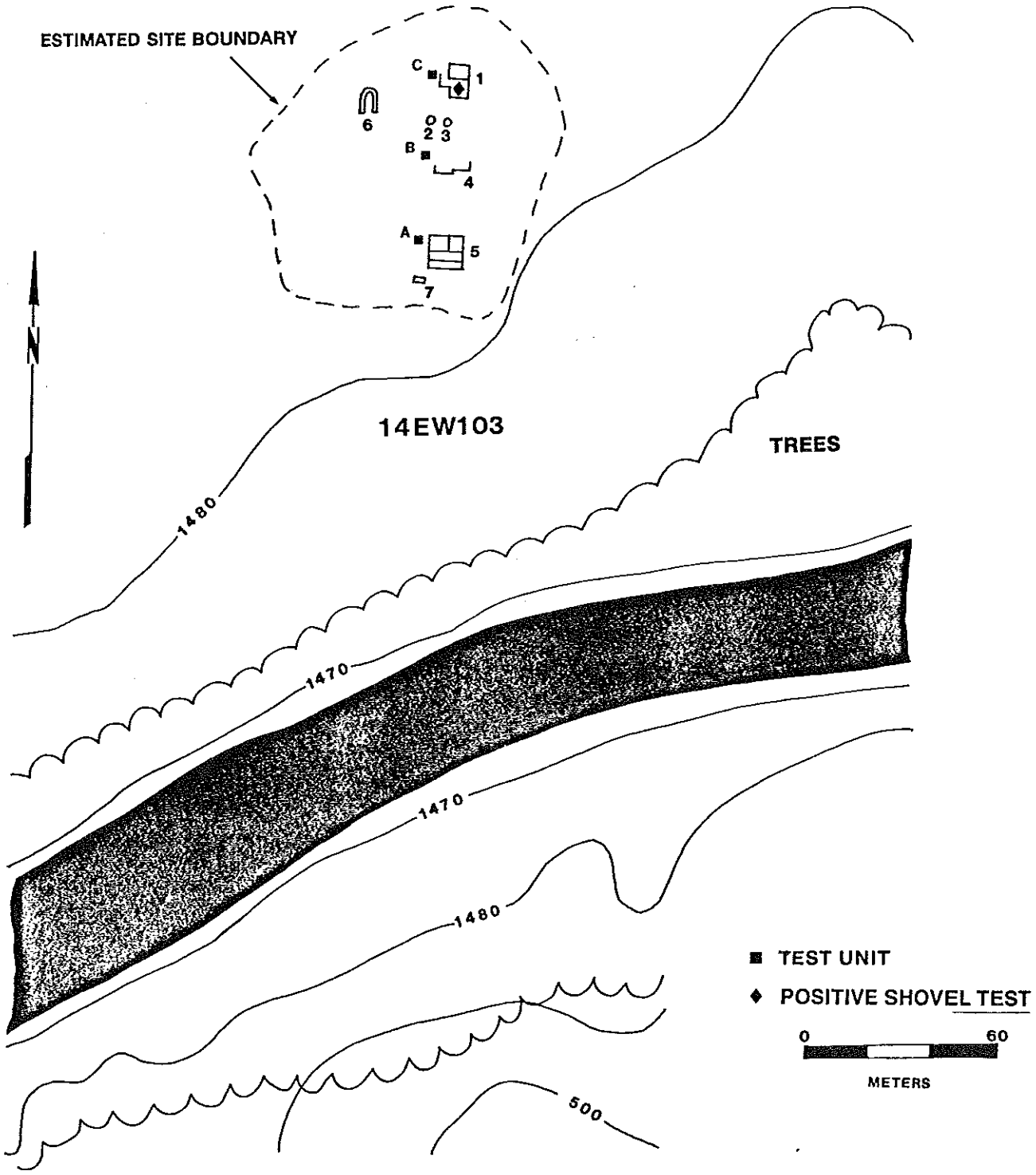

Figure 25. Location and plan view of test excavations at 14EW103.

The artifacts from these test units provide us with an amount of useful information on this site (See Figure 21) (Table 20). Information from Test Unit 1 and the Feature 1 shovel test provide conclusive evidence that this building burned in the relatively recent past. This is important in identifying 14EW103 as the site of the Farisville Post Office - in his 1947 report, Mattes states that this site was recently destroyed by fire (Mattes 1947). Evidence of burning of buildings at this site includes the presence of a relatively thick layer of charcoal and ash on the masonry floor of the Feature 1 cellar as revealed in the shovel test at this location. More conclusive from our work, however, is the evidence from Test Unit 1.

Test Unit 1 was excavated adjacent to and west of a foundation identified as Feature 1 and which we interpret as the main building at this site, probably the post office/residence building. This test unit revealed an additional, previously unknown foundation prepared by a sandstone masonry wall running north by south through the unit. It is uncertain if this foundation is associated with Feature 1 or whether it represents a separate building. Of interest, 13 roofing nails and 107 light to heavy framing nails were recovered from this unit (Table 20), all of which were wire nails. This clearly indicates the 20th century construction of the building which once sat on Test Unit 1 foundation. This date is inconsistent with the suggested date of this site, and our interpretation of the sandstone foundations as 19th century in nature. There are several possible explanations which could account for this finding - it is possible, for example, that the structure represented by the Test Unit 1 wall is separate from Feature 1 and that it was built during this century. From the data at hand, we can clearly say that the building which burned over Test Unit 1 was built in the 20th century, but we cannot extend this conclusion to other parts of the site, even including the adjacent Feature 1 building.

The dates of the fire which destroyed the Test Unit 1 building and, supposedly, the Feature 1 building as well is clearly revealed by the data from Test Unit 1. In the burned rubble in this unit are two bottle fragments, one a clear glass base with a ring seam and the other a clear glass continuous thread jar finish, which were manufactured by an automatic bottle machine, probably after about 1920 (Newman 1970). Significantly, these bottles are both partially melted - their condition and stratigraphic position among the primary destruction layer in Test Unit 1 indicates that they were in the building when it burned, and that it could not have burned until after the manufacture of these artifacts, or after about 1920.

Artifacts from Test Units 2 and 3 are less useful in interpreting the site. Of importance among these, however, is the presence of machine cut nails in both units. This provides virtually the only archaeological confirmation that 14EW103 was indeed in use during the 19th century, a conclusion that is essential if we are to accept this as the site of the Farisville Post Office. In general, the artifact densities in these units was low, suggesting that the associated buildings, Features 4 and 5, probably served specialized, non-domestic functions.

Table 20. Historic artifacts collected from 14EW103

General Surface

Catalog Number	Frequency	Description
34	1	Aqua glass applied lip finish, no mold mark on partial neck.
35	1	Four hold vulcanite button.

Test Unit 1

Level	Catalog Number	Frequency	Description
0-10 cm	1	3	Very rusted nail fragments, wire?
0-10 cm	2	1	Tin fragment.
0-10 cm	3	-	Sandstone fragments.
0-10 cm	4	-	Mortar and sandstone fragments.
0-10 cm	6	2	Fired mud daubbers nests.
10-20 cm	7	1	Melted clear glass ring seam base.
10-20 cm	8	1	Burned ironstone sherd.
10-20 cm	9	13	Wire roofing tacks/nails.
10-20 cm	10	2	Butt-type door hinges.
10-20 cm	11	15	Tin fragments.
10-20 cm	12	3	Charcoal fragments.
20-30 cm	14	2	Aqua window glass fragments
20-30 cm	16	1	Fired mud daubber nest.
		107	Wire nails of varying sizes including light to heavy framing.
		5	Melted clear glass bottle/jar fragments.
		1	Clear glass fragment.

Table 20 continued. Historic artifacts collected from 14EW103

		1	Melted clear glass continuous thread jar finish, automatic bottle machine.
		3	Unidentified brass artifacts.
		1	Unidentified iron artifact.
		1	Small tin can lid fragment.

Test Unit 2

Level	Catalog Number	Frequency	Description
0-10 cm	5	1	Charcoal fragment.
10-20 cm	17	1	Clear glass continuous thread bottle finish, automatic bottle machine.
10-20 cm	18	1	Machine cut nail.
10-20 cm	19	16	Tin fragments.
10-20 cm	20	-	Small brick fragments
		1	Clear glass bottle fragment, probably automatic bottle machine.

Test Unit 3

Level	Catalog Number	Frequency	Description
20-30 cm	23	2	Machine cut nail fragments.
20-30 cm	24	6	Wire nails.
30-40 cm	25	2	Melted clear glass fragments, one is continuous thread jar finish.
30-40 cm	26	1	Brown glazed stoneware.
30-40 cm	27	10	Machine cut nails and nail fragments.
30-40 cm	28	15	Wire nails.
30-40 cm	29	1	Tin fragment.

(continued)

Table 20 continued. Historic artifacts collected from 14EW103

Shovel Test			
Level	Catalog Number	Frequency	Description
40 cm	30	1	Complete crown closure bottle, automatic bottle machine. Painted label: "Vitamin Drinks are good for You/ Just Say Mil-Kay The Vitamin Drink/ St. Louis Mo. Mil-K-Botl Corp. of America".
40-50 cm	31	2	Melted aqua glass fragments.
40-50 cm	31	1	Iron spring.
40-50 cm	33	2	Unidentified iron artifacts.

Since the age and function of this site is farily convincingly known from the archival record, the main contribution that these test pits make to our understanding of the National Register significance of this site lies in the area of site integrity. That is, is this site sufficiently well preserved from an archaeological point of view to warrant its preservation as a source of information? Clearly, the merits of this site as a source of archaeological data are the only grounds on which a nomination could be supported since the buildings once present here have been reduced to foundations and rubble and since no significant events or processes of history are known to be represented by the site.

Information from the test units excavated at 14EW103 suggest that the portion of this site which now lies fallow has probably never been cultivated or disturbed in any substantive way since its abandonment. The lack of cultivation is clearly a factor related to the presence of architectural ruins at this site, which have made this area agriculturally unattractive and have caused it to remain fallow. Given this apparently good state of preservation, we must turn to the question of whether or not 14EW103 warrants nomination to the National Register simply on its data potentials.

Certainly, 14EW103 does possess archaeological information which can be used to increase our understanding of settlement in this area during the ca. 1877 to 1947 period. Immediately, however, this broad range of documented occupation indicates a low level of information clarity. On historic sites, which are typically unstratified deposits of from 20 to 30 cm, the occupation of a site for a long period tends to muddy any interpretations that are attempted. Very few historic artifacts are sufficiently age-diagnostic to allow the segregation of a

combined site collection into menaingful temporal units. As a result, what can be said of a long period occupation site is often less than meaningful, especially when compared to a site characterized by a short-term occupation. Such short term occupations have the clarity on which to base strong and conclusive interpretations. Admittedly, short term occupations for many site types signal an unsuccessful settlement and are relatively rare. They are, however, much more useful archaeologically than their successful, long-term occupation counterparts.

Site 14EW103 can further be identified as a realtively rare resource type because it represents a post office, much less common than, for example, a simple farm/ranch settlement. It is likely, however, that this special function which sets this site aside as unusual was a small aspect of its overall function, which appears to have been as a farm/ranch settlement. It is further unlikely that the specialized function as a post office would be reflected archaeologically. As a result, from an archaeological point of view, 14EW103 represents not a post office but a farm/ranch settlement in use from ca. 1877 to 1947.

In considering the importance of such a site, one must proceed further and consider the rarity of this site type, and its general level of redundancy on the landscape. The survey of potential sites gives some measure of this. In general, looking at this data one can say that the farm/ranch settlement is the most common historic period resource in the Kanopolis area. While it is not known what percentage of those observed during our survey were occupied as early as 1877, it is known that most were occupied by 1901. Overall, therefore, it can be concluded that 14EW103 is a redundant resource in the project area and is generally redundant in Ellsworth County if not on the Great Plains.

Consideration of this site shows that while it has a great amount of archaeological integrity, its long term occupation, lack of archaeological visibility of its specialized function as a post office, and general redundancy as a farm/ranch settlement detract from its overall archaeological significance. Based on the present evaluation, therefore, it is not felt that site 14EW103 represents a cultural resource that is sufficiently significant to warrant nomination to the National Register of Historic Places.

14EW105, Government Bridge Across Smoky Hill River and the Fort Zarah Road

Orders for the construction of a military road from Fort Riley, Kansas, to the confluence of Walnut Creek and the Arkansas River were issued in 1854 by the United States War Department. This road was known variously as the Santa Fe Road, the Fort Riley Road, and the Fort Larned Road prior to the construction of Fort Zarah in 1864, when it became known as the Fort Zarah Road. This road crossed the Smoky Hill River at a point now on Kanopolis Lake project lands. At this crossing, either

in 1854 or 1855, the government constructed a wooden bridge across the Smoky Hill. This original bridge apparently was destroyed by a flood in 1858, and Mattes (1947) suggests that it was never rebuilt but was instead replaced by a ford downstream (14EW106). The 1864 Ellsworth expedition, which resulted in the construction of Fort Ellsworth, was, however, sent to this site for the purpose of protecting the bridge. When government surveyors visited the site in 1866, however, they described it as the "old bridge site" on the Santa Fe Road (Mattes 1947:9). Land records show that the original land patent which is undated was held by Fred Nenka who sold it in 1886 to the Kanopolis Land Company.

The site of the government bridge and the associated Fort Zarah Road was visited by Mattes in 1947, who reported that "Oak pilings, and earthen approach ramps, undoubtedly relics of the 1854 bridge, are still in evidence today (Figure 26). Evidence of trail ruts approaching the ford are equally evident" (Mattes 1947:9). This bridge site and associated Fort Zarah Road were investigated during this project using a non-testing strategy involving the identification and mapping of their physical remains and the evaluation of the general integrity of the remains (Figure 27).

Visits to the site of the government bridge and Fort Zarah Road, 14EW105, revealed well preserved remains of both on government land. At this site, the Fort Zarah Road is visible only on the left bank of the Smoky Hill River, and cannot be traced beyond the government boundary (Figure 28). The observed Fort Zarah Road and site of the government bridge are located in a section of government land that is only 200 m wide. Beyond the government boundary on the left bank is a large sand pit which has certainly destroyed all evidence of this road within its bounds. Beyond the government boundary on the right bank the prairie has been broken by cultivation, which has obscured all evidence of the road. Within government property, however, the Fort Zarah Road is very well defined as it leads to the east end of the site of the government bridge. It consists of a relatively wide road cut with ditches on both sides, and leads directly onto the east approach ramp to the site of the government bridge.

Ruins of the government bridge are equally well preserved at 14EW105. Observed remains of this bridge consist of earthen approach ramps on both the right and left bank of the Smoky Hill, and two sets of two pilings each observed in the bed of the Smoky Hill (Figure 29). These pilings were observed in pools by the right and left bank, with the area in-between being a sand bar. It is possible that additional pilings are preserved beneath this sand bar. In general, this site is very well preserved although it is covered with a denser secondary growth than is shown in Mattes' 1947 photograph, which probably is a view of the approach ramp on the right bank of the Smoky Hill (Mattes 1947).

During the visit to the west approach ramp on the right bank of the Smoky Hill, a bucket auger was used to excavate a core through the center of the earthen ramp. This was intended to provide some insight

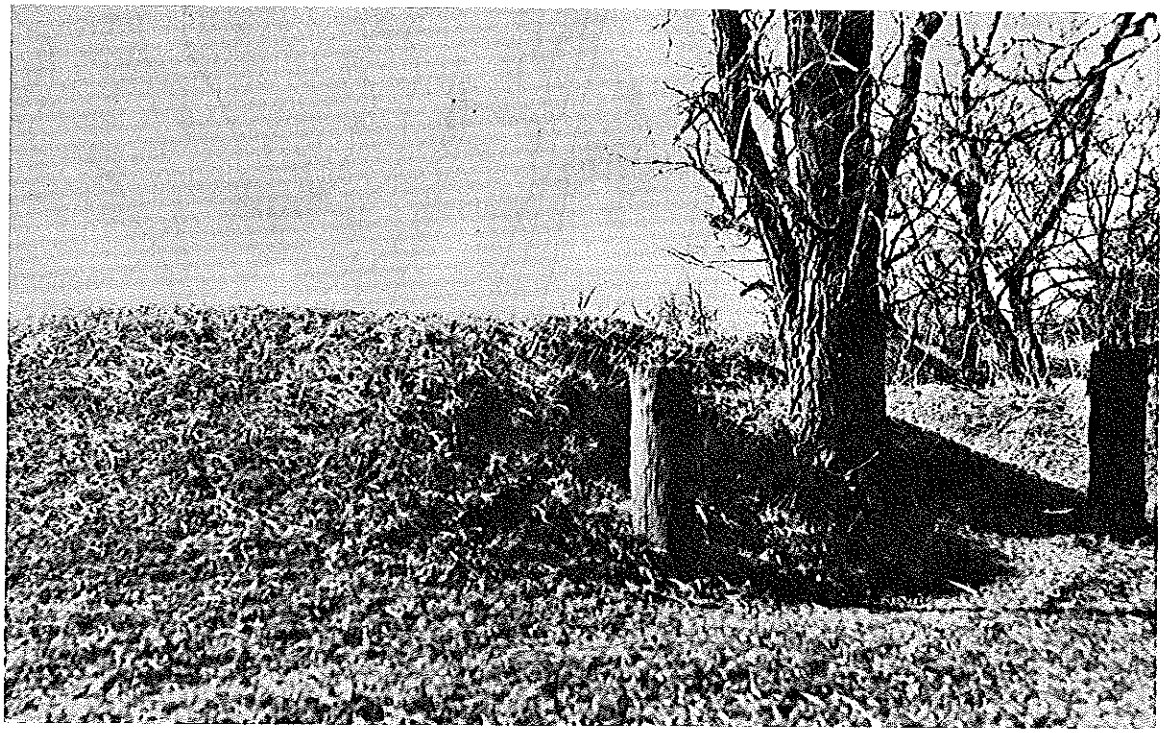

Figure 26. View of 14EW105 in 1947 (Courtesy, Kansas State Historical Society).

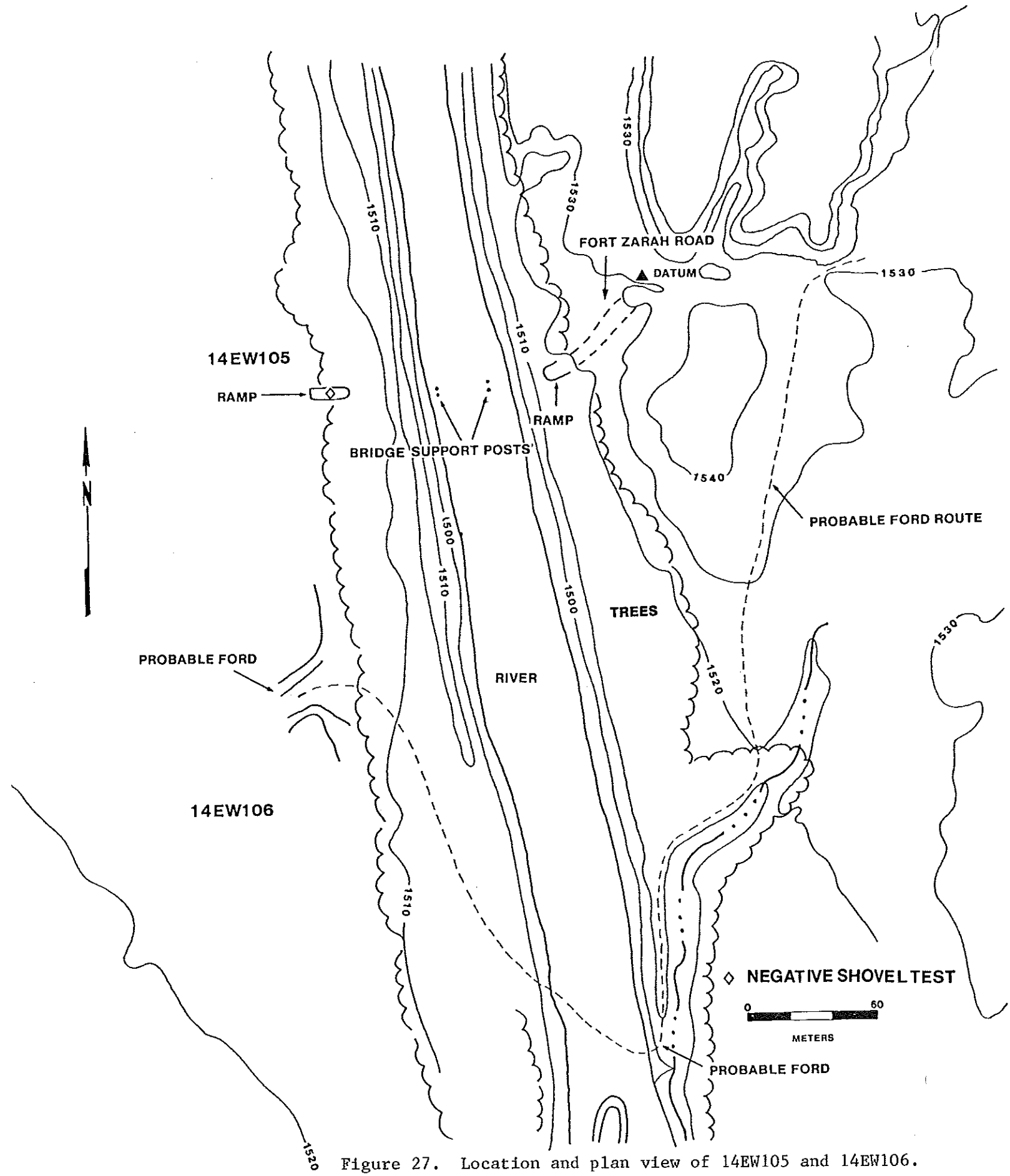

Figure 27. Location and plan view of 14EW105 and 14EW106.

Figure 28. General view of 14EW105. Mapping the Fort Zarah Road

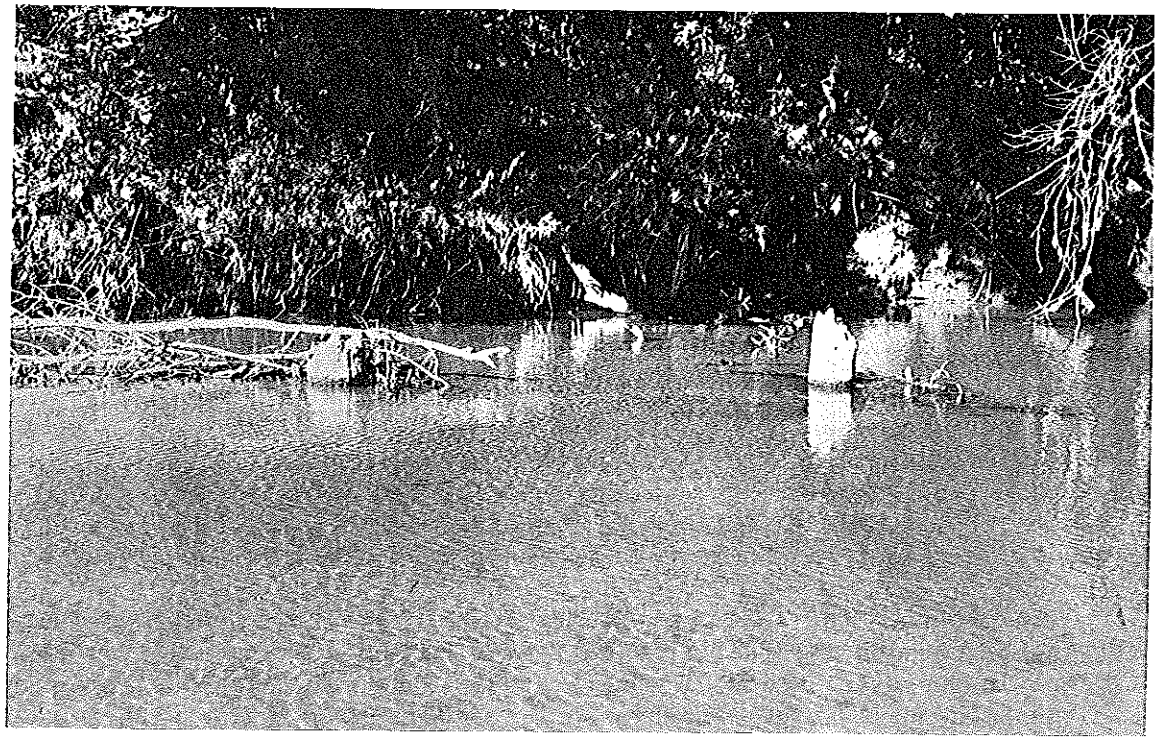

Figure 29. General view of 14EW105. Bridge pilings in the Smoky Hill River.

into the construction of this earthen feature. This auger core was excavated to a total depth of 110 cm below modern ground surface and revealed an extremely consistent deposit including a brown sandy clay layer between 0 and 30 cm, grading into a light brown sandy clay which extends to a depth of 96 cm, where it grades into a light brown sand. This light brown sand extends to the base of the auger test, at 110 cm. The consistency of soil revealed in this auger test was somewhat unexpected - we anticipated some artifical bedding to have resulted from the borrow and fill activities which must have been required to construct the bridge approaches. Obviously, any source of borrow for this feature was itself consistent.

The site of the government bridge and the section of the Fort Zarah Road that can be observed leading to it represent very well preserved archaeological remains. The significance of this road and the site of the government bridge where it crossed the Smoky Hill River centers on its role as an important artery of transportation during the early settlement of Kansas, and specifically including its importance for the establishment of Fort Ellsworth at this location. In addition, both the remains of the bridge and the section of road preserved at this point represent excellent sources of archaeological information on civil engineering on the frontier. Overall, therefore, site 14EW105 does appear to represent a significant cultural resource that is eligible for inclusion on the National Register of Historic Places.

14EW106, Smoky Hill Ford and Fort Zarah Road

After the government bridge (14EW105) across the Smoky Hill River was destroyed, either in 1858 or about 1865, the Fort Zarah Road crossed the Smoky Hill at a ford located downstream from the bridge site. Mattes, who visited this ford in 1947, reported its location as being some 200 m downstream from the bridge site (Mattes 1947:2). In his report, Mattes provides photographs of this ford including a historical view taken during its active use and a view of the ford as it appeared in 1947. Due to extensive changes in the vegetation of the area, neither photo can be directly compared to the present landscape, although both are useful in evaluating the general lay of the land.

The site of the Smoky Hill Ford, and the section of the Fort Zarah Road that led across it, were investigated using a non-testing approach that was to focus on identifying and mapping the remains of this site and evaluating the general integrity of preservation of this site. Our intensive survey of the government land located downstream from the bridge site, 14EW105, resulted in the discovery of much less convincing remains of this road and ford than had been observed at the bridge site.

In general, the left bank of the Smoky Hill River in the vicinity of the bridge and ford sites is characterized by a steep valley wall except in one area, which is interpreted as the only possible approach to the Smoky Hill ford. At this spot, a 300 m long ravine with a wide, flat floor descends from the uplands to the left bank of the Smoky Hill River. This ravine probably carried the Fort Zarah Road to the Smoky

Hill Ford, and is oriented so as to join the road leaving the bridge in the uplands overlooking both the bridge site and the ford, in an area now consumed by a sand pit. There exists, however, no evidence on the landscape that this ravine and the Fort Zarah Road are one and the same.

With respect to the actual Smoky Hill Ford, there is absolutely no evidence of its existence preserved on the modern landscape. The banks of the Smoky Hill River are today several meters high, a probable result of increased sedimentation since the completion of Kanopolis Lake (see 14EW7), and it is probable that the remains of the Smoky Hill Ford are today buried or otherwise lost from view.

A survey of the right bank for evidence of the Fort Zarah Road as it departed the ford to the west revealed no evidence of a road directly opposite the ravine hypothesized as the road on the left bank. There is, however, evidence of a road further up the Smoky Hill, between the suspected ford site and the site of the government bridge (Figure 30). This evidence consists of what appears to be the remains of a wide road, such as is expected for the Fort Zarah Road, as it cuts across the edge of a terrace. The rise involved here is only between one and two meters, but the wide, gradual rise from one terrace to the next is unprecedented in the area surveyed and has all the appearances of a road cut. It has been interpreted as the probable site of the Fort Zarah Road, and it is suggested that once the road left the Smoky Hill Ford it followed the first terrace north towards the government bridge, cut across the edge of the second terrace near the bridge, and rejoined the old Fort Zarah Road as it left the site of the government bridge.

In sum, therefore, there was only one location in the vicinity of the Smoky Hill Ford that we felt was archaeologically identifiable as a cultural feature that could be associated with the ford and the Fort Zarah Road leading to and from it. It is felt, however, that the route of the Fort Zarah Road on the left bank is made fairly obvious by the existence of only one feasible approach to the river, but verifiable archaeological evidence to back this up could not be found. The Smoky Hill Ford may be preserved at this site, but if it is, it is probably buried by several meters of modern sediments.

Like the Fort Zarah Road and the site of the government bridge that crossed upstream (14EW105) the site of the Fort Zarah Road and the Smoky Hill Ford (14EW106) represent a significant part of the historical past of Kansas. However, very little verifiable remains of this ford and the road leading up to it were observed in the field, and, as a result, it is not felt that this site represents a cultural resource sufficiently preserved to warrant nomination to the National Register of Historic Places.

14EW119, The Black Ranch

The Black Ranch, or more precisely the barn on the Black Ranch, was one of a number of sites identified in 1947 by Mattes as possessing importance as a representative example of the architectural record of

Figure 30. General view of 14EW106, Possible site of Fort Zarah Road in the vicinity of the Smoky Hill Ford (14EW106).

central Kansas (Mattes 1947) (Figure 31). Located immediately north of the Black Ranch but beyond the limits of this site, is the site of the Smoky Hill Trail/Denver Express Road (14EW153) also listed by Mattes as historically important. Mattes' research and the historical research conducted during this project failed to uncover an association between the Black Ranch and any events or persons of great historical importance, suggesting that National Register evaluations at this site would indeed best be focused on its archaeological and/or architectural importance. Original land records show a U.S. land patent to D.H. Howard in 1885. No person named Black is every listed as owner in this section of land or for any of the adjacent sections.

The Black Ranch stands out as extremely unusual within the Kanopolis project area because of its large complement of standing architectural resources. These architectural resources include a mixture from the 19th and 20th centuries; they include:

1) An intriguing dwelling house obviously dating to the 19th century but also showing evidence of modification and use during the first half of the 20th century and possibly later (Figure 32-33). This dwelling was built using an unusual combination of frame and masonry construction. It is set on a Dakota sandstone foundation, which includes a partial cellar, and its superstructure is of half-timber or timber-frame construction (Figure 34). Half or timber framing can be defined as "a method of construction where walls are built of timber framework with the spaces filled in by plastar or brickwork. Sometimes timber is covered with plastic or (weatherboarding)" (Fleming et al. 1977:286) At 14EW119 the timber framing was filled in by brickwork and was covered on the outside by clapboards and on the inside with a plaster stucco.

Overall, this building is in poor condition. Much of the damage to this building can probably be attributed to water damage from a failed roof. Extensive sill rot and rot around certain windows, however, probably predates the failure of the roof.

2) A spring or well house constructed of Dakota sandstone (Figure 35).

3) A barn constructed of Dakota sandstone. Inside framing of this barn utilizes square cut nails throughout, indicating its 19th century construction, and a limestone block set into the east facade carries the date 1878 and what appears to be a stylized longhorn steer. This barn is the feature that Mattes discussed in his 1947 report. It was in extremely poor condition during the fall of 1984 - the sandstone walls had settled and the barn appeared in imminent danger of collapse. The barn collapsed in the summer of 1985.

4) A metal shed of recent construction located in a corral by the barn.

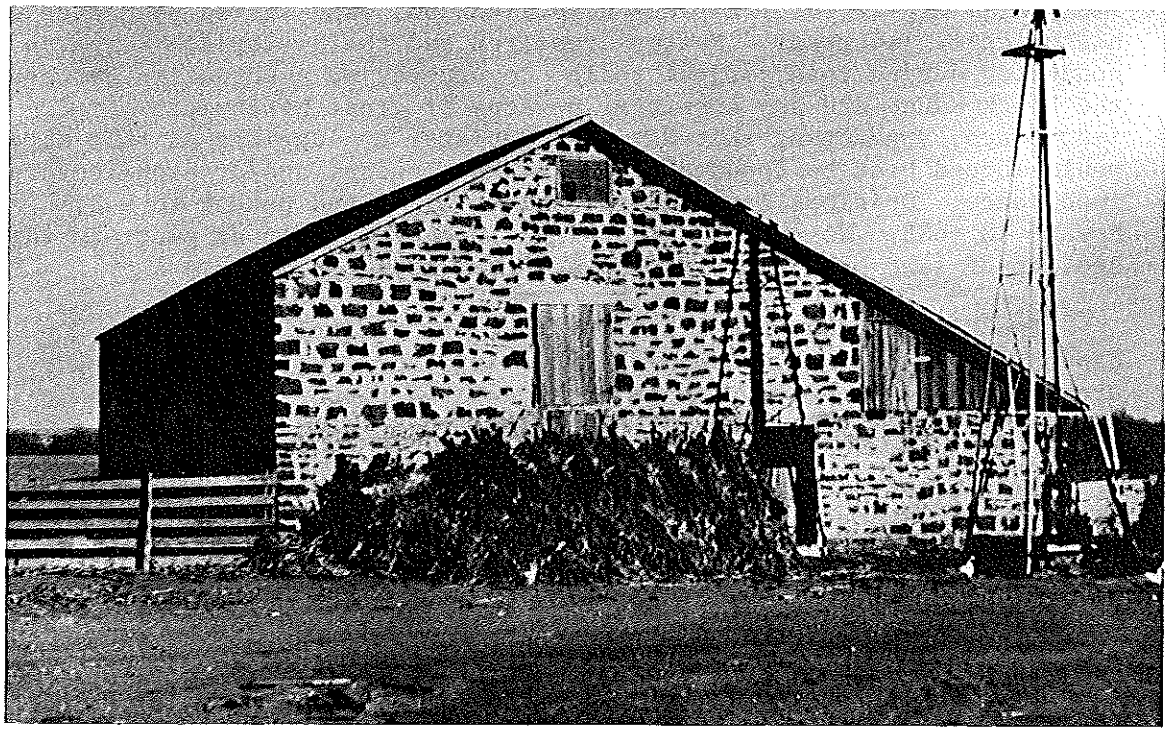

Figure 31. The 1878 barn at the Black Ranch (14EW119) as it appeared in 1947 (Courtesy, Kansas State Historical Society).

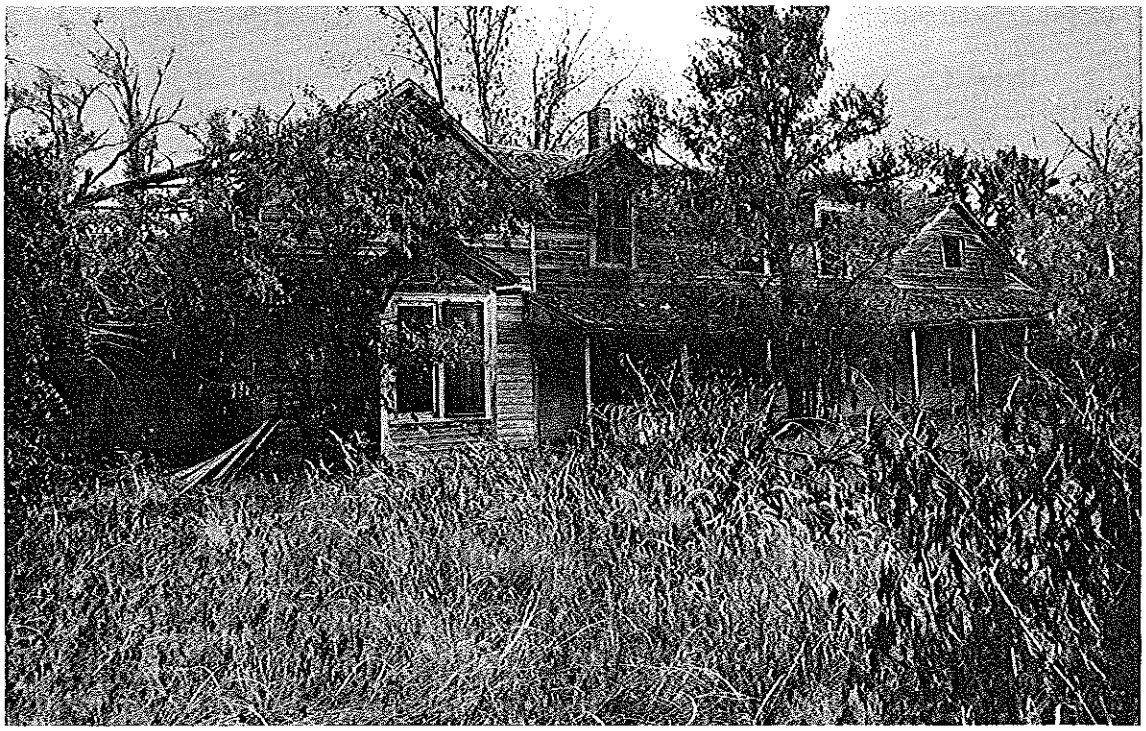

Figure 32. General view of structure 1 at 14EW119.

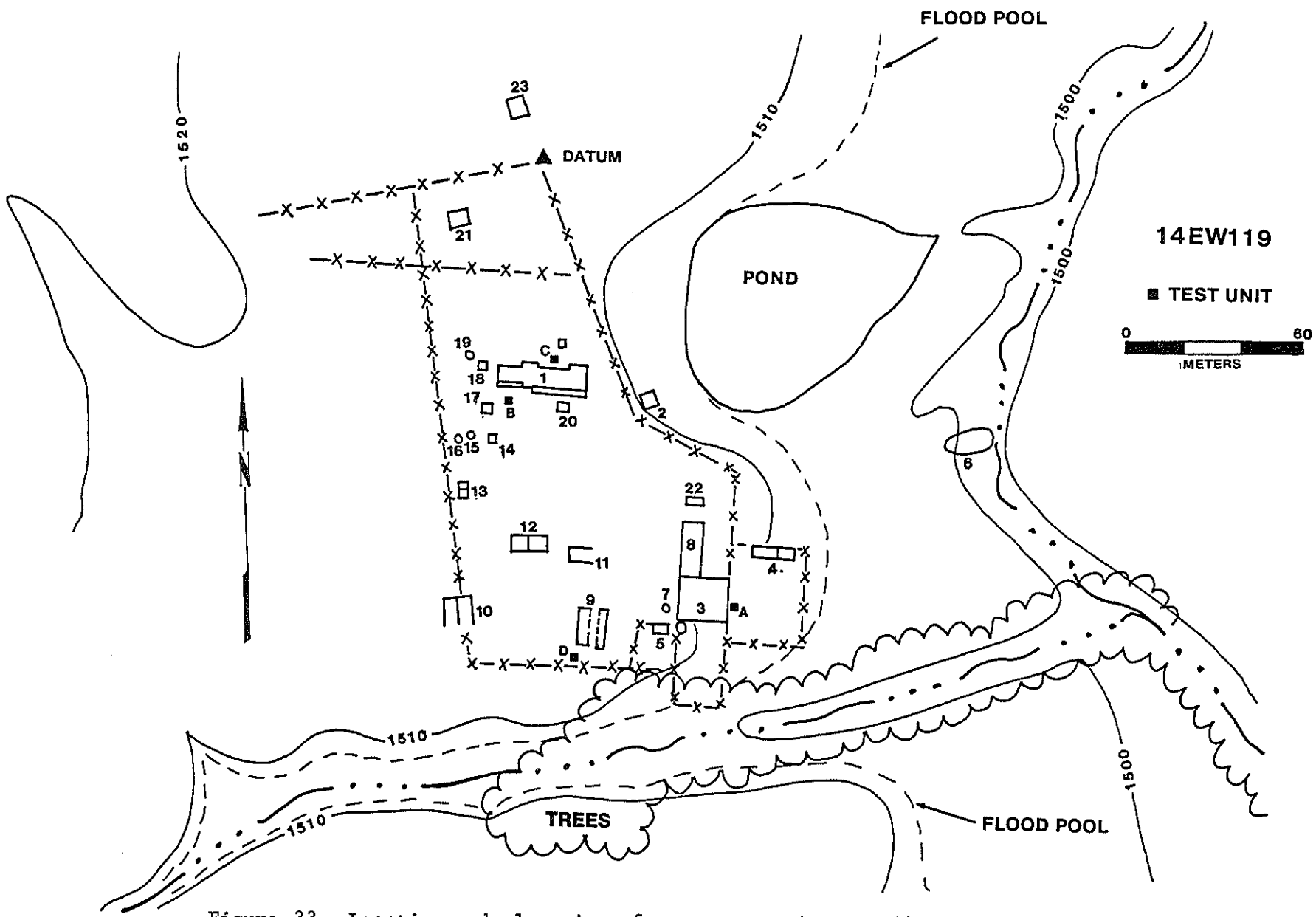

Figure 33. Location and plan view of test excavations at 14EW119.

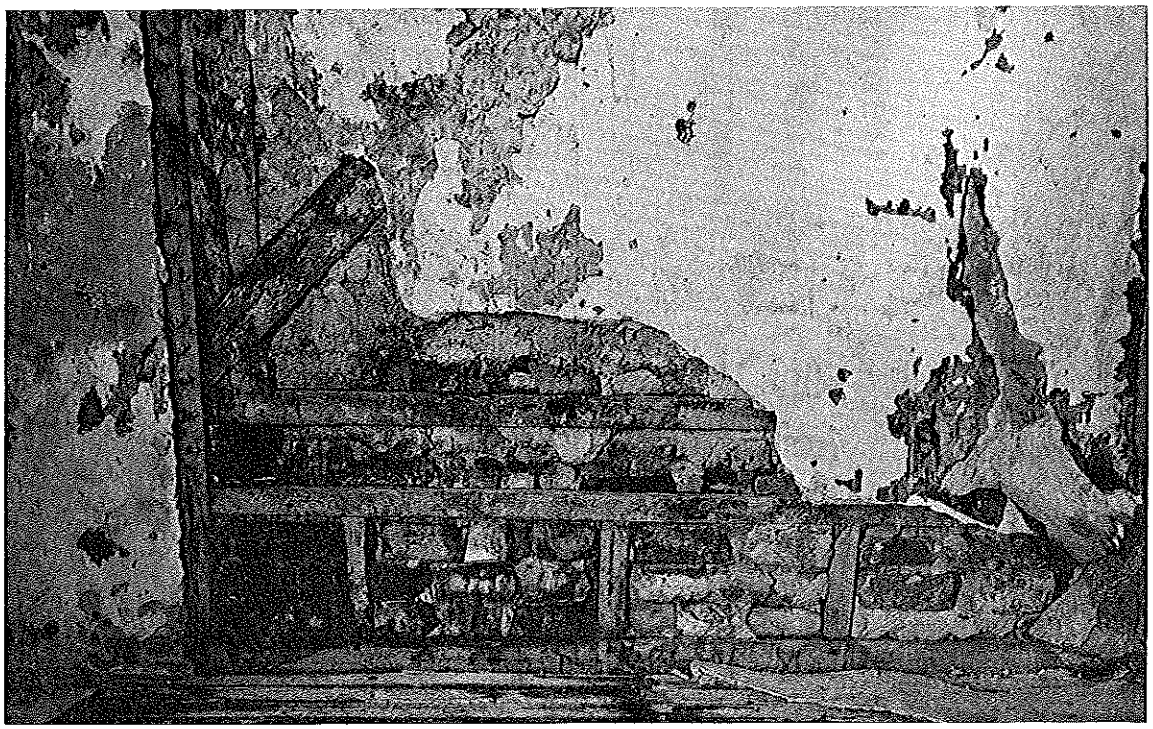

Figure 34. Standing architecture at 14EW119. Detail of timber frame wall at Structure 1.

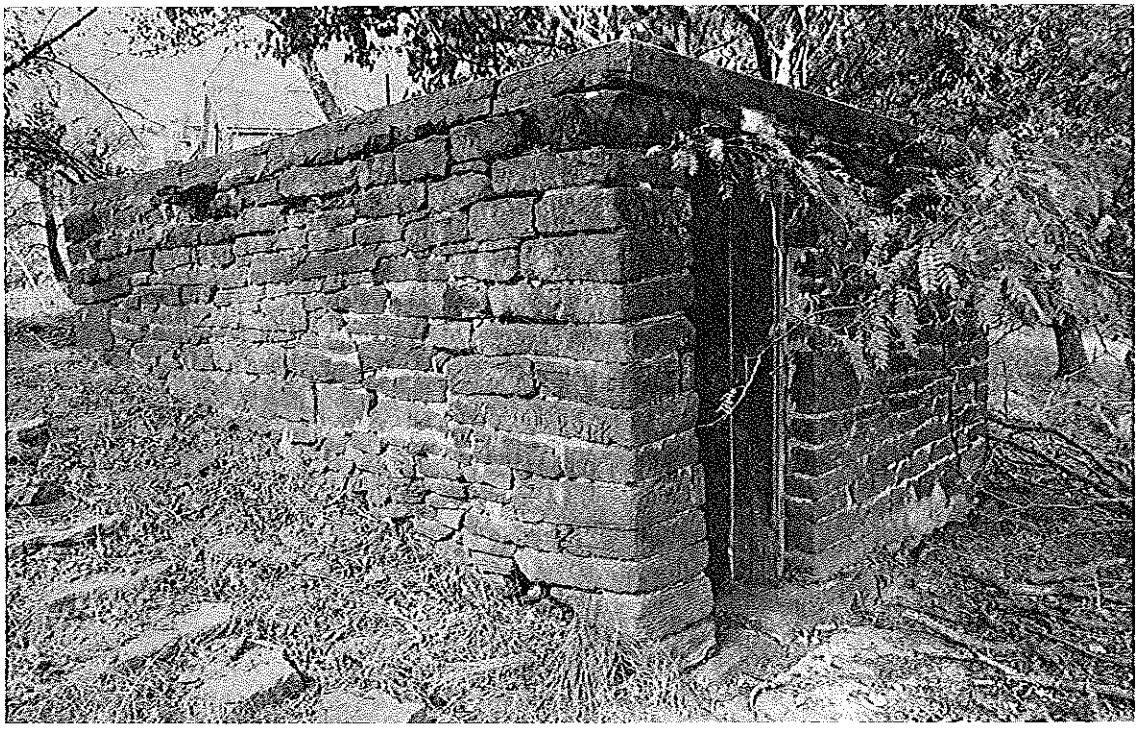

Figure 35. Standing architecture at 14EW119. Dakota Standstone spring house. Structure 2.

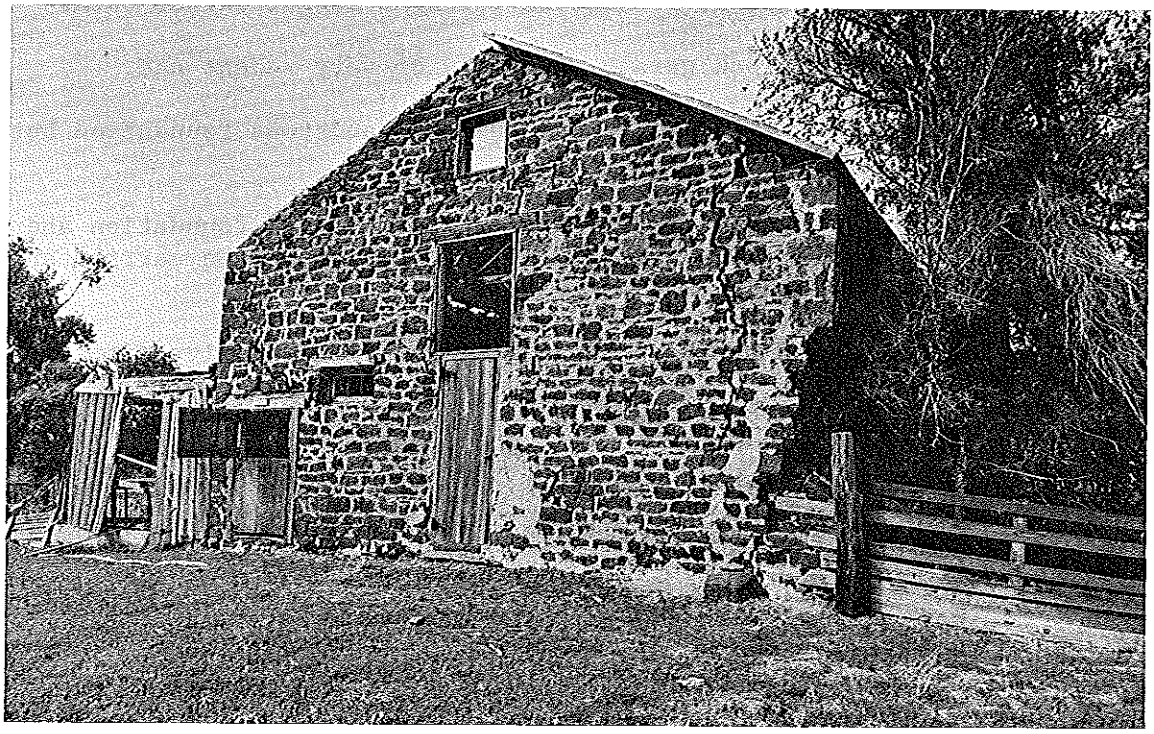

Figure 36. General view of 1878 barn, Structure 3 at 14EW119.

5) A concrete block and metal shed located in a corral by the barn.

6) A silage pit or trench silo probably of fairly recent construction.

7) A windmill.

8) A concrete slab foundation of a no longer extant outbuilding.

9) A 20th century tractor barn set on a poured concrete foundation and utilizing wire nails throughout.

10) A poured concrete foundation for a no longer extant barn.

11) A concrete-block garage, probably of very recent age.

12) A frame outbuilding set on a Dakota sandstone foundation but utilizing wire nails throughout.

13) A frame outbuilding set on a poured concrete foundation and utilizing wire nails throughout. The concrete foundation carries an inscribed date of either 1930 or 1938.

14) An overturned frame privy and its associated privy pit.

15) An abandoned privy pit.

16) An abandoned privy pit.

17) A poured concrete slab for a no longer extant outbuilding.

18) A poured concrete slab which appears to be a cover for a cistern (?).

19) A brick lined shaft well.

20) A cistern.

21) A frame chicken coop.

22) A slab foundation of an unknown outbuilding.

23) A frame chicken coop.

Of these 23 architectural features (Figure 33), only the dwelling house and sandstone barn are obviously 19th century, although the sandstone spring or well house may also be of that age. The remainder of the features appear to date from the 20th century occupation of the site, with certain of these, such as the concrete-block garage, probably dating to the period since the construction of Kanopolis Lake.

In general, the architectural resources of the Black Ranch provide excellent information on the age (1878 to the 1940's) and function (farm/ranch settlement) of this site. Archaeological testing of this site therefore focused on verifying what appeared to be an excellent integrity of preservation at this site. A total of four one by one m test pits were excavated at the Black Ranch. Two of these were located near the dwelling, with one on the north and one on the south side. The two additional units were located near barn buildings, with one located on the east side of the 1878 barn and one to the south of a 20th century frame barn (Building 9). All four of these test pits verified an excellent integrity of archaeological deposits at this site; that is, the revealed a deposit of artifacts in a soil matrix showing no evidences of post-depositional disturbances.

In addition to these one by one m test units, three bucket auger tests were excavated at an obvious privy depression and two similar depressions which were also felt to represent privies. The similarities of the stratigraphic record inside these depressions, one of which is known to be a privy pit, demonstrates satisfactorily that all three are privy pits.

Artifacts from these excavations do not provide us with information about this site beyond what was already known from other sources (Table 21). Artifacts such as machine cut nails and bottle finishes show the use of the site during the 19th century, but wire nails, a plastic dial knob, and a plastic toy block demonstrate the use of the site into this century and up to the mid 20th century. This conclusion is, however, clearly evident from an examination of the sites architecture, which demonstrates use of the site between 1878 and mid-twentieth century.

Table 21. Artifacts collected from 14EW119.

General Surface

Catalog Number	Frequency	Description
31	1	Aqua bottle finish, applied lip, mold seam does not extend beyond base of neck.

Test Unit A

Level	Catalog Number	Frequency	Description
0-10 cm	1	2	Window glass fragments.
0-10 cm	2	2	.22 rimfire cartridges, "F" headstamp
0-10 cm	3	6	Mortar fragments.
0-10 cm	4	1	Wood fragment.

Level	Catalog Number	Frequency	Description
0-10 cm	24	1	Unidentified iron artifact.
0-10 cm	25	1	Brick fragment.
0-10 cm	26	1	Coal.
0-10 cm	27	1	Asphalt shingle fragment.
0-10 cm	28	1	Two-strand plastic insulation wire.
10-20 cm	29	1	Cut nail.
0-10 cm	30	1	Coal clinker.

Test Unit B

Level	Catalog Number	Frequency	Description
0-10 cm	5	17	Aqua window glass fragments.
0-10 cm	6	8	Clear bottle glass fragments.
		5	Amber bottle glass fragments.
		1	Green glass fragments.
		3	Aqua bottle glass fragments - one is a panel fragment.
0-10 cm	7	1	Clear glass marble.
0-10 cm	8	5	Undecorated whiteware sherds
0-10 cm	9	6	Sherds of gaudy yellow and green ceramics.
0-10 cm	10	1	Clear glazed stoneware sherd.
0-10 cm	11	1	Clear glazed stoneware sherd.
0-10 cm	13	1	Rivet.
0-10 cm	14	1	Cotter pin.
0-10 cm	15	2	Wood screws.
0-10 cm	16	1	"Lee" stud button cover.
0-10 cm	17	1	Zinc jar lid with opal glass lid liner.
0-10 cm	18	1	Folded lead sheet.

Level	Catalog Number	Frequency	Description
0-10 cm	19	1	White plastic dial knob.
		1	Black plastic fragment.
		1	White plastic toy block.
0-10 cm	20	1	Canning jar fragment.
		4	Aqua window glass fragments.
10-20 cm	21	1	Clear bottle glass fragment.
10-20 cm	22	1	Machine cut nail.
10-20 cm	23	1	Unidentified metal artifact.

Auger Test 1

Level	Catalog Number	Frequency	Description
0-30 cm	32	1	Wire nail

Auger Test 2

Level	Catalog Number	Frequency	Description
0-30 cm	33	1	Cut nail fragment.
0-30 cm	34	1	Mortar fragment.

In considering the National Register significance of the Black Ranch, we must consider both the architectural and archaeological merits of this site. The architectural merits of 14EW119 focus on its 19th century components, the dwelling and sandstone spring or well house. The importance of these resources in the project area is made clear by the rarity of standing, relatively intact buildings from this period. Furthermore, the dwelling appears to represent an excellent and very unusual example of 19th century Kansas architecture.

The dwelling was obviously modified through the years as needs for space increased, and the result is an intriguing, rambling building. The construction of this building, which can be defined as half-timber or timber-frame construction was not duplicated elsewhere in the project area and appears to be a very unusual form of construction. The importance of the Black Ranch buildings as rare architectural historical resources therefore appears very high.

Regardless of the merits of the buildings of the Black Ranch as significant architectural historical resources, it is felt this site possesses significance as a source of archaeological information. This significance falls in three areas, and involves the evolution of the

dwelling; the evolution of the ranch settlement as reflected in the overall settlement pattern; and the functional relationship of non-perishable to perishable architectural fabrics and materials.

In examining these areas of archaeological importance of this site, it is useful to discuss the relationship between standing architecture and archaeology. In general, studies of cultural resources often draw a false dichotomy between standing architecture and archaeology, and present an illogical and inconsistent approach to their treatment and analysis. If standing and intact, architecture if often seen as beyond the domain of the archaeologist and all decisions on its importance and utility are typically assigned to the architectural historian. If, on the other hand, a building burns during its study, it becomes archaeological and beyond the interest of the architectural historian. What such a dichotomy, built solely on the current condition of a building, fails to respect is the fact that both archaeologists and architectural historians can profit from the study of architecture regardless of whether it is standing or in ruin.

In reviewing the archaeological importance of 14EW119, the standing architectural and buried archaeological resources can be examined separately. The buried archaeological resources have been demonstrated to be in excellent condition as a result of this project. These resources, nevertheless, represent a long term occupation of this site from ca. 1878 to the mid 20th century. Detailed archaeological study of this site focused on the discovery of all architectural remains and the dating of the construction and use of these architectural components has the potential to provide valuable information on the evolution of this farm/ranch settlement.

An understanding of the evolution of a successful, large, and long term ranch settlement such as the Black Ranch can provide information important for our understanding of the agricultural settlement of Kansas. This area is, however, not the only source of important archaeological information present at the Black Ranch. The standing architecture of this site, such as the dwelling, can also provide important archaeological information on the evolution of this site and on the relationship between perishable and non-perishable building fabric during the 19th century.

The Black Ranch dwelling is particularly felt to contain significant archaeological information on these topics. Of methodological importance to archaeology is the information the structures contain with respect to construction technology. Specifically, an analysis of the architectural elements of these vernacular, frontier buildings, particularly non-perishable elements such as nails and masonry in their functional contexts, can provide valuable base-line data for analyses of buildings which are no longer standing. Such studies are currently based on a small sample of 19th century building manuals, with little attempt having been made to study the actual practices utilized. This is particularly important for vernacular and non-standard architecture, which might be expected to deviate from architectural rules such as are presented in period building manuals.

The dwelling additionally possesses important archaeological information on the evolution of the Black Ranch. This building obviously underwent numerous successive modifications in order to increase the size of the buildings. Documenting the succession and nature of these changes can provide important information for the general understanding of the evolution of the overall ranch settlement.

The archaeological information preserved in the standing 19th century architectural resources at the Black Ranch is felt to be substantially more significant than that preserved elsewhere in the site. This greater significance is related in part to the rarity of standing 19th century architecture in the project area. Also of importance is the probability that the 19th century buildings at the Black Ranch, and particularly the dwelling, represents an unusual architectural form. The standing architecture at the Black Ranch therefore appears to be sufficiently significant, from both an architectural historical and an archaeological standpoint, to warrant nomination of 14EW119 to the National Register of Historic Places.

14EW139, Red Rock Canyon Rock Shelter

In his 1947 report on the historical aspects of the Kanopolis Reservoir, Mattes mentions several sites which were located above the floodpool of the lake but which he nevertheless felt to be of some historical interest (Mattes 1947). One of these was what he described as "rock shelters of uncertain date used by early homesteaders" in Red Rock Canyon (Mattes 1947:5). Beyond this, he was unable to provide any information and our archival research has likewise turned up no information that there were indeed rock shelters on Red Rock Canyon used by early homesteaders. Land records show John H. Yingst as the original owner until 1887. Probably the same Yingst named for school district #18 nearby.

The approach to the National Register evaluation of this alleged site focused on its archaeological testing. Since we were dealing with a supposedly natural feature, a rock shelter, which had been utilized by early settlers, the work first focused on examination of Red Rock Canyon to determine how many possible shelters existed that might have served such a function. Mattes was of little help in narrowing our search since his report contains only very general locational information.

The initial visit to Red Rock Canyon indicated that sandstone rock outcrops suitable for use as rock shelters could only exist in the upper reaches of the canyon. This area was surveyed on foot to identify potential shelters. While a number of unreasonably small shelters or areas that might represent collapsed shelters were located, there was only one shelter observed on government land that was of suitable size and properly situated to have been used by early historic inhabitants of the area (Figure 36).

This rock shelter was located at the bottom of Red Rock Canyon, along the right or west wall (Figure 37). It had apparently been carved out of an outcrop of Dakota sandstone by the action of water. In front

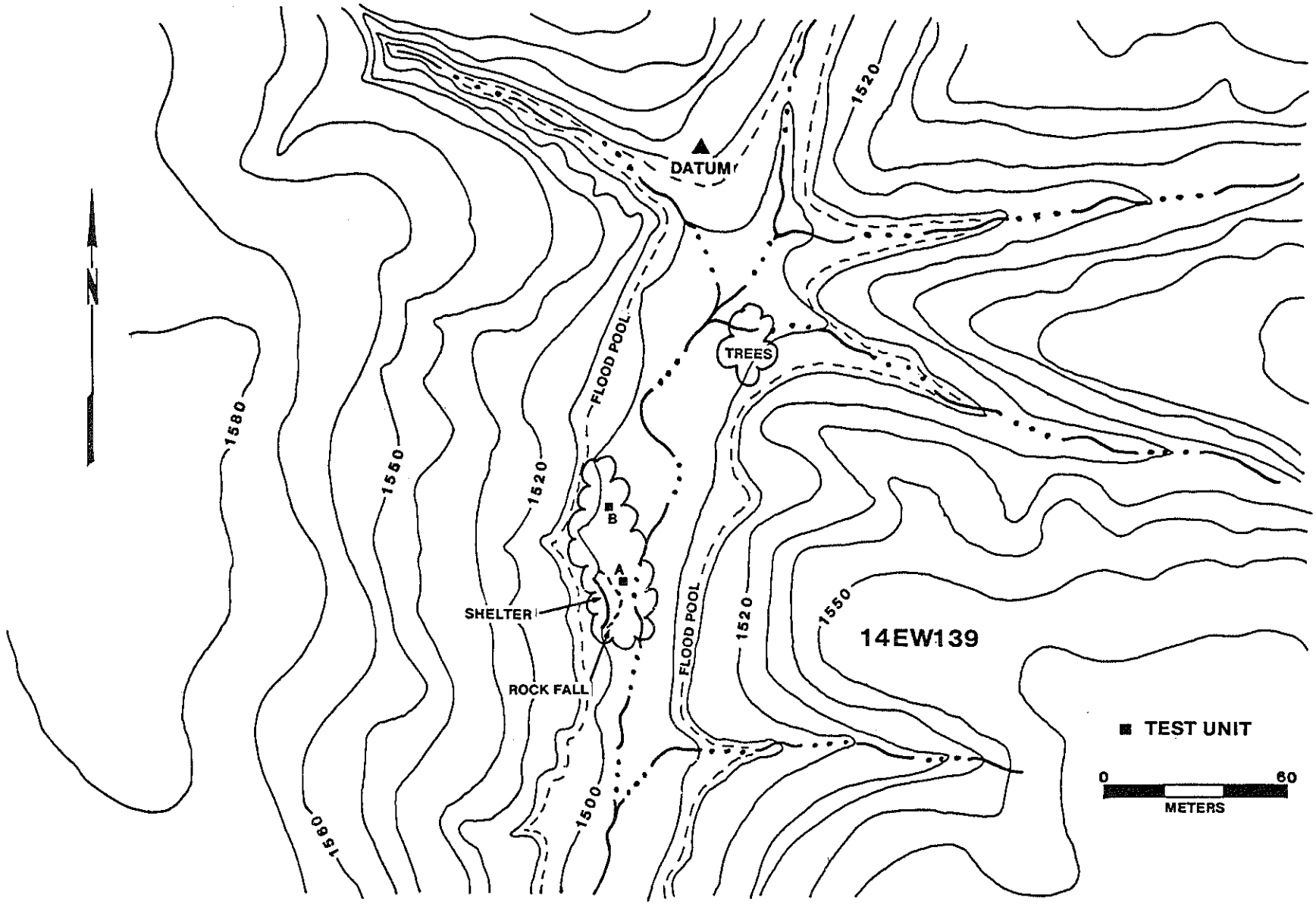

Figure 37. Location and plan view of test excavations at 14EW139.

of this shelter and for some distance up the canyon from it was an area of fairly flat terrace. The floor of the shelter was, however, covered with roof fall, much of it massive in size. Much of this fall appears to have derived from the overhang itself, indicating that the shelter may have been substantially larger in the past. The age of this fall is, of course, uncertain, and it is unknown if it was clear at any time during the historic period.

Due to the presence of massive fall over the floor of the shelter, test excavations could not be conducted there. Instead, a one by one m test pit was placed beyond this fall directly outside the shelter. This area should have been utilized had the shelter been used culturally. In addition, a second one by one m test pit was placed 25 m up the canyon from this first test pit, in an open, well drained area that could have been utilized by any historic inhabitants of the area. Neither of these test pits contained any cultural materials, and the soils in both appear to have developed gradually from alluvial stream deposits and sands eroded from the bluffs lining the canyon.

The only evidence of historic use of this area consisted of historic carvings on the sandstone bluff immediately north of the rock shelter (Figure 38-39). Much of this carving was covered by lichen, but what could be observed included a probably recent skull and cross bones device and several names and dates. In general, most of these carved names appeared to be fairly old, and two of the observed dates were 1903 and 1907, indicating knowledge of the area during the very early part of this century.

It is possible that the shelter at 14EW139 was used by early historic settlers in a very transient fashion as a campground or picnic spot. Such use would be unlikely to have resulted in the significant deposit of cultural artifacts at this site, making its archaeological visibility extremely low. However, based on our historical research, there is no evidence that this site was ever utilized in the fashion suggested by Mattes. Based on our inability to document any use of this site beyond the carving of graffiti, it is our opinion that 14EW139 does not represent a cultural resource which warrants nomination to the National Register of Historic Places.

14EW152, The Millett Ranch

Like the Black Ranch, the Millett Ranch was mentioned in Mattes' 1947 report on the historical aspects of Lake Kanopolis because of its representative sandstone barn (Mattes 1947:2,24). The original owner of this land, James F. Ellison, sold it to Millet in 1879. The Millett Ranch, also known as "Idaville", was, however, one of the largest in the area in the late 1800s, including as much as 38,000 ac at one time. This ranch was organized by Eugene B. Millett, a Texas cattle rancher who eventually moved to his Ellsworth County ranch in the 1880s. As were many ranchers in the area, Millett was financially crippled by the blizzard of 1886, and was never able to recover. Millett lost all of his heavily mortgaged ranch lands in Kansas and Texas in the Panic of 1893.

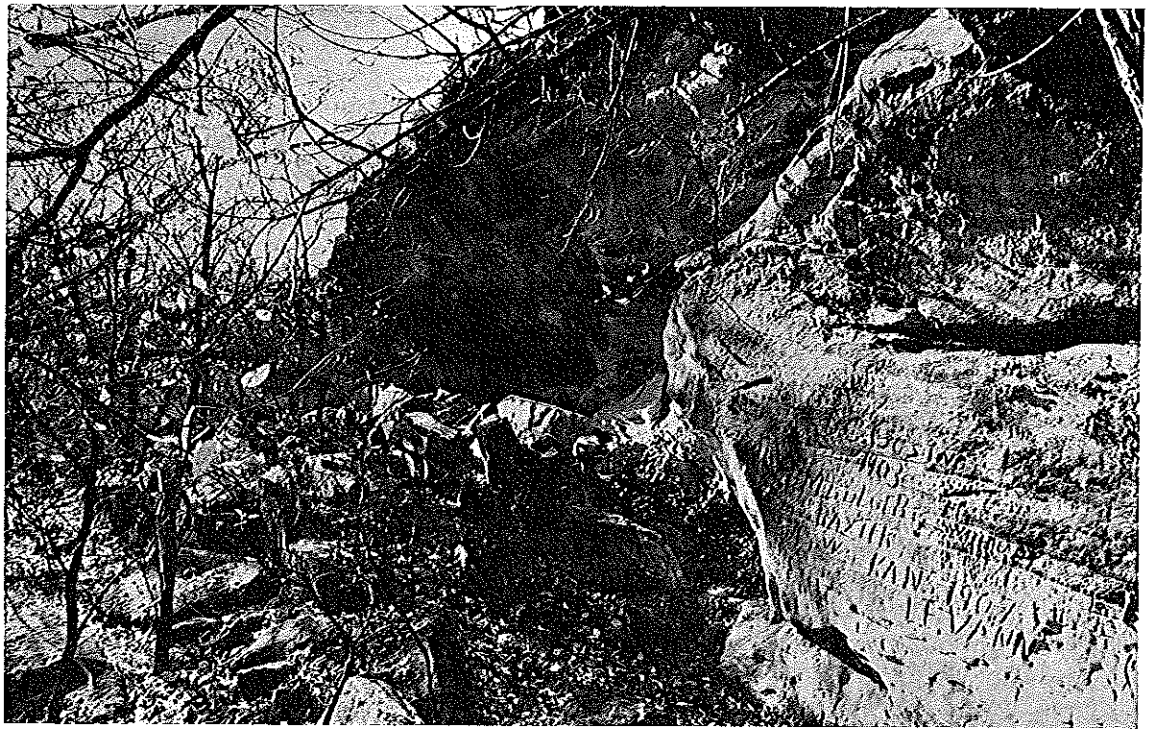

Figure 38. General view of 14EW139 rock overhang and historic carvings.

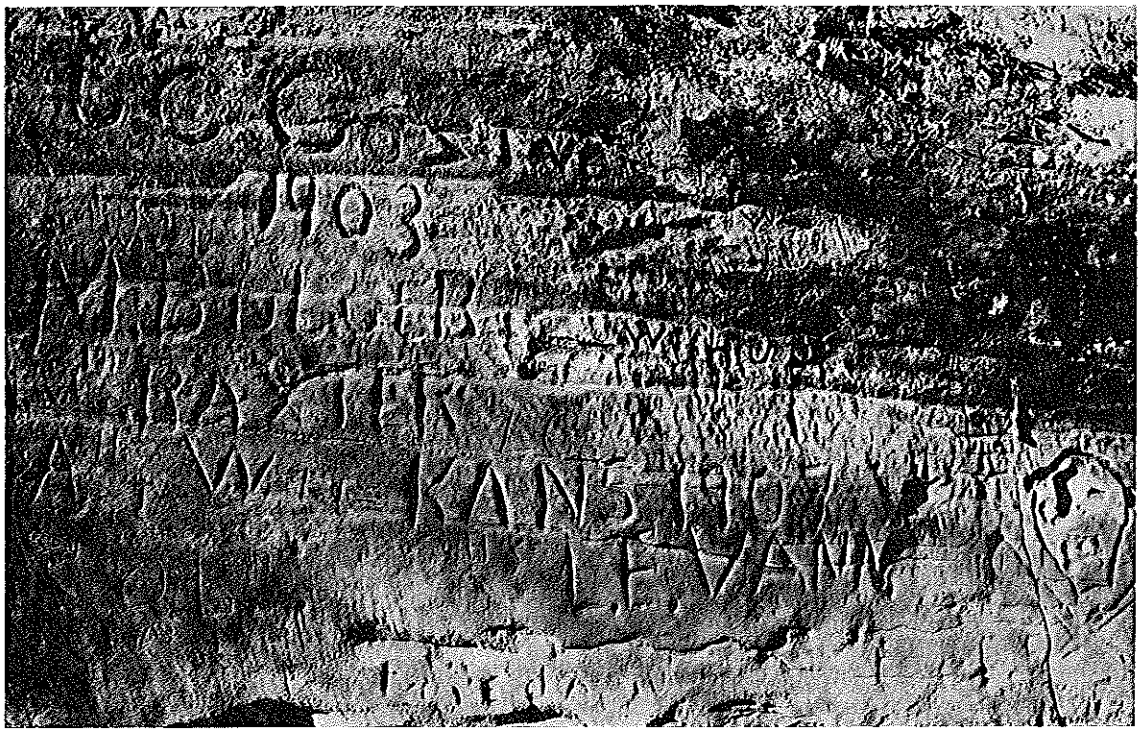

Figure 39. Historic graffiti at 14EW139.

There is some difference of opinion on the location of the Millett or Idaville ranch settlement of the 1880s and 1890s. Some sources indicate that it is now inundated by Kanopolis Lake, but Mattes places it above the current shore at a site known locally as the Larson Ranch. Historical research conducted in association with the testing of 14EW152 shows that in 1918 this site was the residence of H. A. and Elvin Larson and was located on the Smoky Hill Ranch. The Smoky Hill Ranch was at that time owned by Olaf Larson. The Larson Ranch was created when Millett's Idaville ranch was subdivided following its foreclosure in 1893. Of interest to our research, the settlement at the point indicated by Mattes as the Millett Ranch is shown on the 1918 plat of Ellsworth County, but does not appear on earlier plats.

Evaluation of the National Register significance of the Millett Ranch involved its archaeological investigation. This investigation resulted in the preparation of a general site map and the excavation of three one by one m test pits within the site limits (Figure 40). The site as observed consists of a number of architectural features. These features include the poured concrete cellar foundation of a dwelling (Feature 1) (Figure 41); the poured concrete foundation of an outbuilding (Feature 2) (Figure 42), the poured concrete foundation of an outbuilding, possibly a garage (Feature 3); a poured concrete slab foundation of an outbuilding (Feature 4); an intact artificial cave of poured concrete construction (Feature 5) (Figure 43); a low mound containing sandstone rubble and which may represent a building mound (Feature 6); what is probably a spring house, made of Dakota sandstone, located up a small spring-fed tributary from the main settlement (Feature 7); a poured concrete foundation of a barn (Feature 8); and the foundation of two silos built of red ceramic tile blocks (Features 9 and 10). Notably lacking in our inventory of this site is the sandstone barn described as present at the Millett Ranch. The potential significance of this will be discussed later.

Except for the spring house, which may be earlier, all of these architectural features appear to date from the 20th century. This is particularly true of the silos, which are probably fairly recent. One of these silos is inscribed with the name "Larson", and certainly dates to the period of Larson ownership following the demise of the Millett Ranch. The artificial cave at this site is also demonstrably 20th century - it is inscribed with the date "10/23/1913". Although probably also 20th century, the foundation of the dwelling at this site, Feature 1, is interesting in that parts of agricultural equipment were cast into the poured concrete foundation, probably as reinforcing (Figure 44). These parts are only visible in portions of the foundation that have broken open.

Archaeological test units, one by one m in size, were placed in three locations at site 14EW152: behind the Feature 1 dwelling (Test Unit B), within the Feature 6 mound (Test Unit A), and by the Feature 7 spring house (Test Unit C). The test pit placed by the Feature 7 spring house was totally devoid of cultural material, probably a function of the isolated location of this structure and its very specialized use. Test Unit B, excavated by the Feature 1 dwelling, resulted in the discovery of a dense deposit of refuse (Table 22). The excavation of

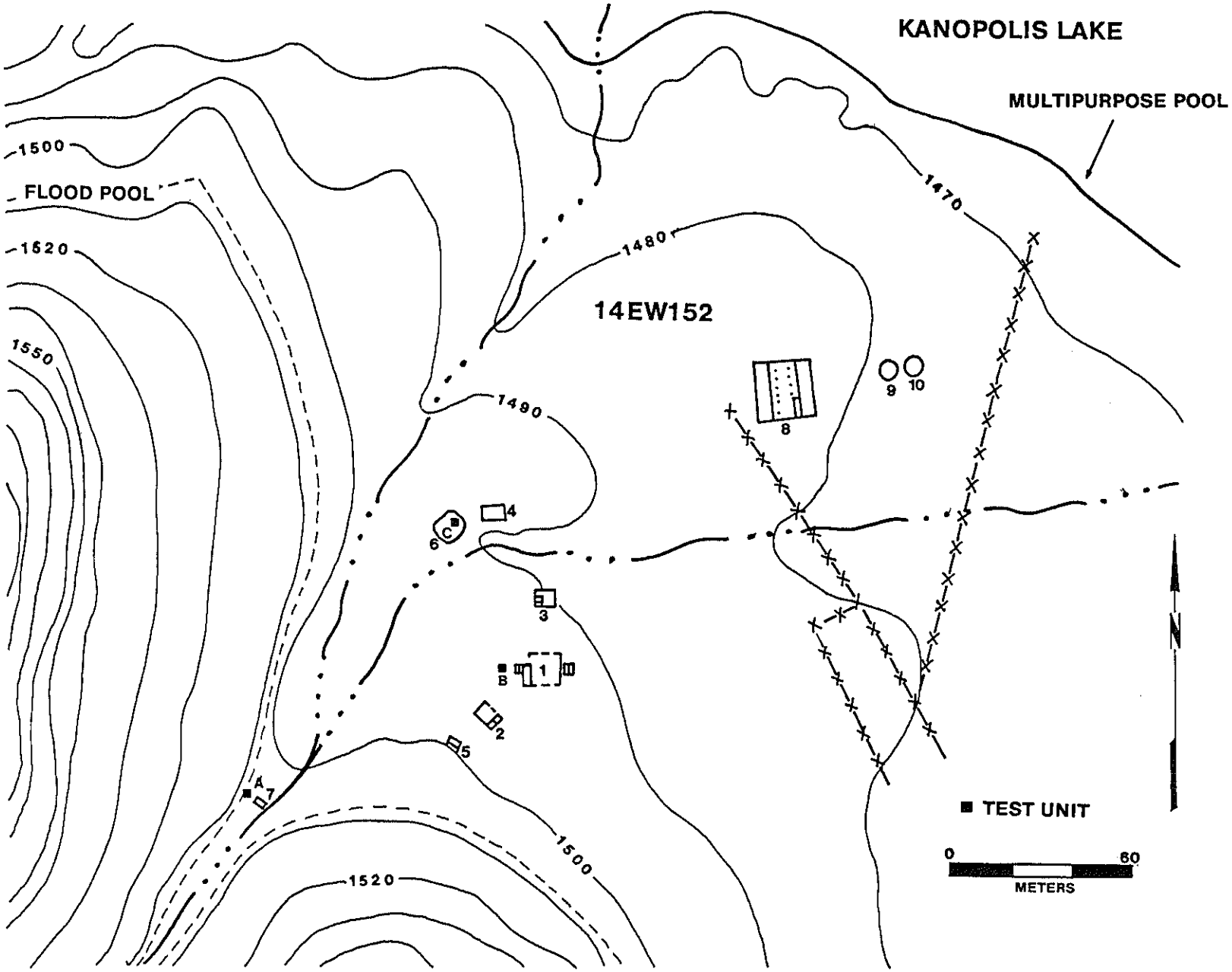

Figure 40. Location and plan view of test excavations at 14EW152.

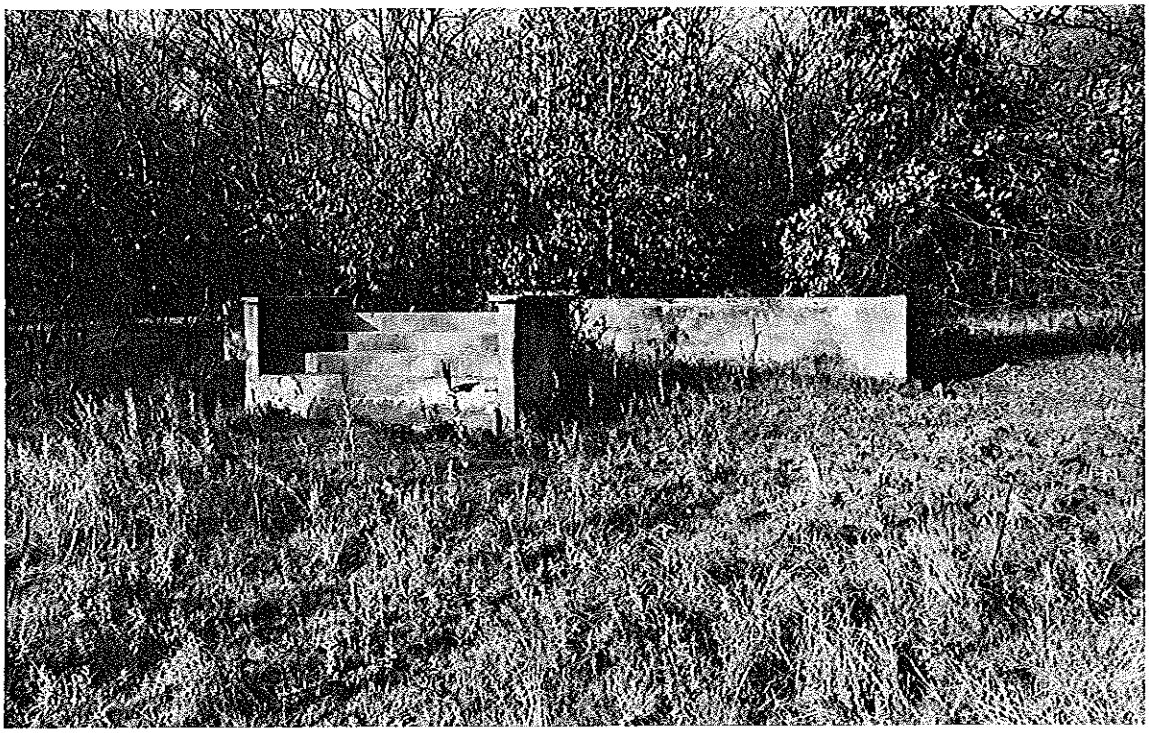

Figure 41. General view of 14EW152 structure 1 foundation.

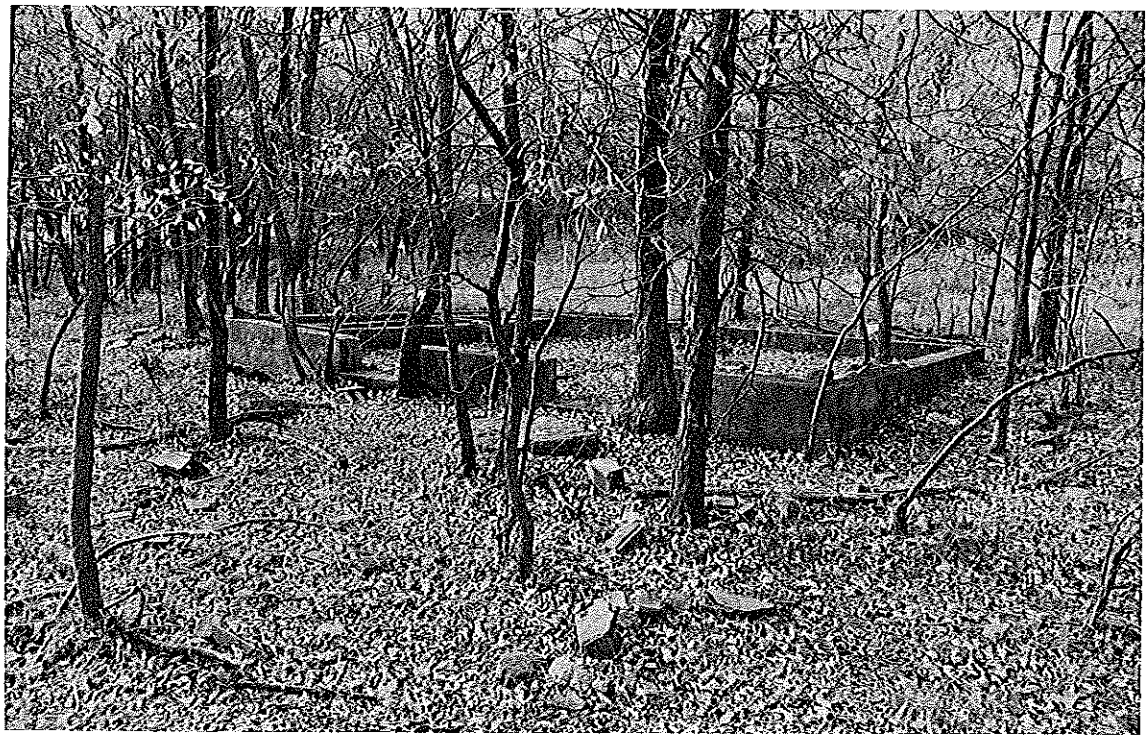

Figure 42. General view of structure 2 at 14EW152.

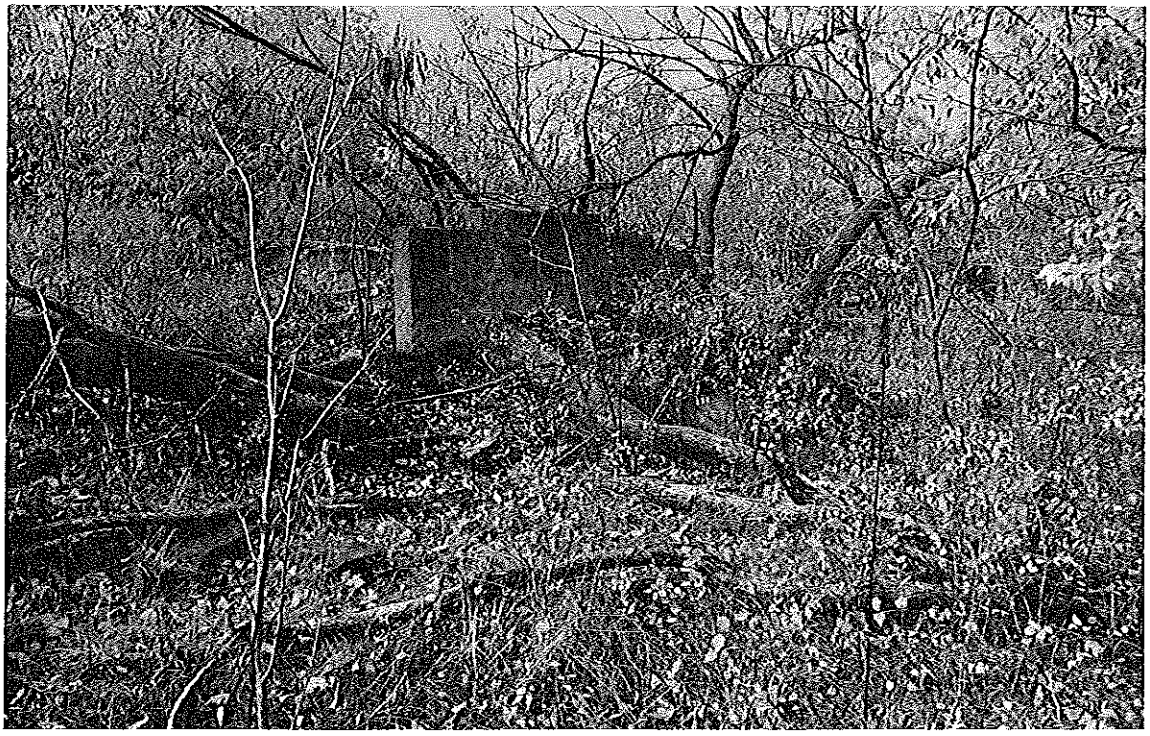

Figure 43. General view of structure 5 at 14EW152.

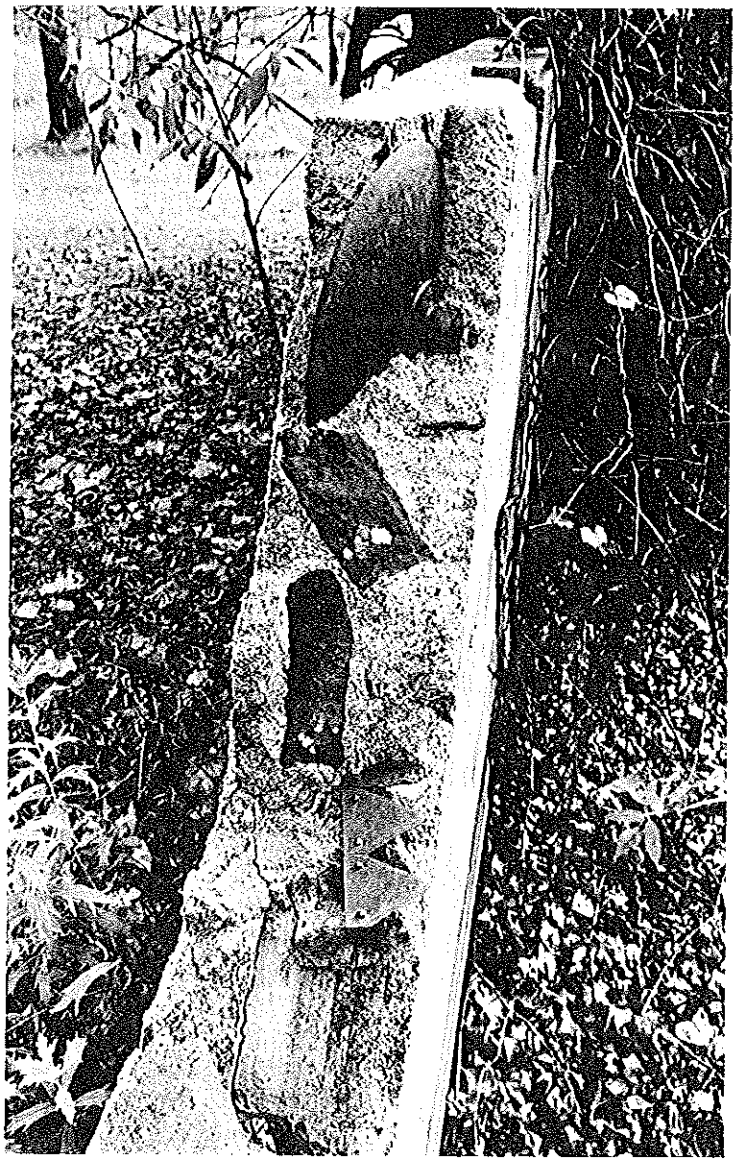

Figure 44. Wall profile at structure 1 of 14EW152 showing imbedded agricultural implements.

this test pit indicates a great degree of integrity of preservation at this location.

Table 22. Artifacts collected at 14EW152.

Level	Catalog Number	Frequency	Description
		Test Unit A	
0-10 cm	1	1	Machine cut nail fragment.
		1	Machine cut nail.
0-10 cm	3	1	Wood screw.
0-10 cm	4	1	Coors beer can, all aluminum, opener required.
0-10 cm	5	6	Rusted tin.
		Test Unit B	
0-10 cm	6	2	Clear bottle glass fragments.
		1	Amber bottle base, ring seam, automatic bottle machine.
0-10 cm	7	1	Clear glass crown finish, automatic bottle machine.
0-10 cm	8	1	Wire nail fragment.
0-10 cm	9	1	Ceramic drain tile fragments.
0-10 cm	10	5	Coal.
0-10 cm	11	1	Coal clinker.
10-20 cm	12	2	Aqua bottle glass fragment
		1	Clear bottle base, ring seam, automatic bottle machine
		3	Clear bottle glass fragments, two with embossing.
10-20 cm	13	1	Cut nail fragment.
		1	Cut nail.
		1	Unidentified nail fragment.
		13	Wire nails.

Level	Catalog Number	Frequency	Description
10-20 cm	14	2	Twisted heavy guage wire.
10-20 cm	15	5	Crown caps.
10-20 cm	16	9	Tin fragments.
		1	Lead, squeeze type tube.
10-20 cm	17	1	Ceramic drain tile fragment.
10-20 cm	18	1	Cut bone.
10-20 cm	19	2	Cut bone.
10-20 cm	20	1	Aqua window glass.
20-30 cm	21	1	Opal glass fragment.
		1	Opal glass finish to a continuous thread jar.
		2	Clear glass fragment.
20-30 cm	22	2	Machine cut nail fragments.
		2	Machine cut nails.
		11	Wire nails.
20-30 cm	-	1	Wire staple.
20-30 cm	25	2	Crown caps.
		1	Aluminum, continuous thread bottle cap.
20-30 cm	27	1	Coal.
20-30 cm	29	1	Cut bone.

Artifacts from Test Unit B included 19th century artifacts such as machine cut nails, but much more common were clearly 20th century artifacts such as bottles manufactured by the automatic bottle machine after about 1920; and crown bottle caps and a clear glass crown bottle finish, in use after the turn of the century. In general, the materials from this test unit, which include relatively high frequencies of bone, coal clinkers, ceramics, and bottle glass, is indicative of a domestic function.

Test Unit A, placed within the feature 6 mound revealed no definite evidence of a structure at this location, but did reveal provisional evidence of a 19th century occupation in the form of several square cut nails. The recent use of this area was shown as well by the discovery of an all-aluminum Coors can. Coors was the first to use the all-aluminum can, introducing it in 1959 (Clark 1977:11).

Despite a very rich historical record of the Millett or Idaville Ranch, on which 14EW152 was certainly located, it seems unlikely as a result of our research that this site is indeed the location of the 1880s and 1890s settlement for this ranch. It seems more probable that this was the location of a settlement built by the Larson's on the Larson ranch, created from the old Idaville ranch. Mattes' identification of this site as the location of a sandstone barn from the original Idaville ranch is therefore probelmatical - there was certainly no evidence of such a structure at 14EW152 or in the general vicinity. It seems probable that this barn as well as the rest of the original Idaville settlement is under the waters of Kanopolis Lake, and that Mattes 1947 identification of the location of this settlement and barn were in error.

In considering the significance of 14EW152, therefore, it appears that we are considering the significance of the 20th century Larson ranch settlement rather than the settlement of the 19th century Idaville ranch. While the Idaville ranch has clear historical importance as one of the largest 19th century ranches in the Kanopolis area and as the home of an important figure in the western cattle industry of the 19th century, such a case of historical importance is difficult to make for the Larson ranch and settlement.

The Larson ranch was one of numerous 20th century farm/ranch settlements documented on Kanopolis Lake lands during this survey, and cannot be construed to be a rare or unusual cultural resource. It is, rather, best termed a redundant data source. Despite the fact that 14EW152 is characterized by good integrity of preservation, its late date, redundancy, and its apparent lack of association with events of historical importance makes this site less than significant. It is our opinion, therefore, that 14EW152 does not constitute a cultural resource that is sufficiently significant to warrant nomination to the National Register of Historic Places.

14EW153, The Smoky Hill Trail

Site 14EW153 consists of a section of the Smoky Hill Trail or Denver Express Road as it passes across government land (Figure 10). The only portion of this trail on government property crosses a narrow projection of project lands just northeast of the Black Ranch (14EW119) and east of the community of Kanopolis. D. H. Howard and T. H. Logan are listed as owners prior to 1883 in the land records. At this location, this road was also part of a military trail known as the Fort Zarah Road (See 14EW105 and 14EW106). The Smoky Hill Trail/Denver Express Road ran between Fort Riley, Kansas, and Denver, Colorado. It served as a route used by gold miners to reach the Colorado River in 1859 and into the 1860s, and was also the route of the shortlived Butterfield Overland Dispatch Stage Line, which began operation in 1865. The Smoky Hill Trail/Denver Express Road was made obsolete by the completion of the Kansas Pacific Railroad to Denver in the 1870s. For all practical purposes, the Kansas Pacific Railroad followed the route of the Smoky Hill Trail/Denver Express Road, although in the Kanopolis

Lake area its route is slightly north of that of the Smoky Hill Trail/Denver Express Road, and does not pass across government land.

The portion of the Smoky Hill Trail/Denver Express Road which exists on Kanopolis Lake lands was evaluated with a non-testing strategy. The focus of this strategy was to determine whether or not observable and intact remains of this trail were preserved on the landscape. The location of the site of this trail was identified by transferring the route of this trail as shown on the 1887 plat of Ellsworth County onto standard U.S.G.S. topographic quadrangles of the project area. This allowed us to focus on as small an area as possible for our search of what we expected to be the very subtle, or nonexistent, remains of this road.

A field visit to the area of the Smoky Hill Trail/Denver Express Road revealed that the portion on government land and for some distance in either direction was in unbroken prairie - the only setting in which evidence of this road was expected to be preserved. An examination of the landscape in the area identified as the location of this road on the 1887 map revealed in places clear and in places very subtle remains of an abandoned road paralleling that shown in 1887. The location and configuration of the road observed on the landscape so closely paralleled that shown in 1887 that there can be no question that the observed road is indeed the Smoky Hill Trail/Denver Express Road.

Observed remains of this road consist of a broad but shallow trough snaking through the prairie with a general east by west orientation (Figure 45). The width of this trough was highly variable, and was almost impossible to measure due to its subtle edges. At certain well defined area, however, it was observed to vary between two and nine meters. In general, at any point on government land, the road can be seen for some distance in either direction. The most perceptible sections of the road are, however, where it crosses the numerous rises which characterize the undulating prairie in the area, and where it cuts across a terrace edge on its way across an intermittent tributary. This road can also be seen clearly on aerial photographs of the project area, and can be traced in unbroken prairie for many miles in either direction.

The section of road designated here as 14EW153 represents the location of the Smoky Hill Trail, the Denver Express Road, and the Fort Zarah Military Road. It was an important artery of transportation during the late 1850s to the 1870s when it was replaced by the Kansas Pacific Railroad, and served variously to carry military traffic, gold seekers to Colorado, and stages of the Butterfield Overland Dispatch Stage Line. This road, therefore, can be seen to have significance for the early settlement of Kansas and the Central Plains in general. This historical significance, and the well preserved remains of this road observed on government land at Kanopolis Lake, lead us to recommend 14EW153 as a cultural resource of state significance that is eligible for listing on the National Register of Historic Places.

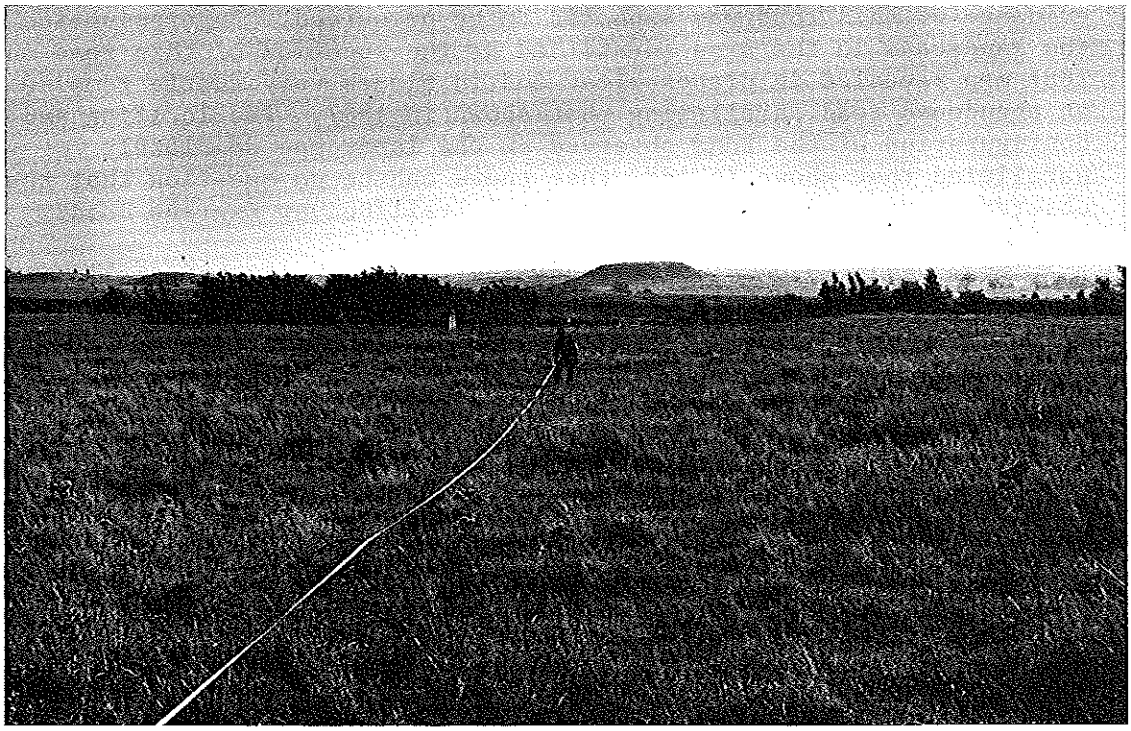

Figure 45. General view of 14EW153, documenting the Smoky Hills Trail.

14EW154, Horsethief Creek Site

This site is described by Mattes (1947:2) only as "Two alleged 'stage stations' or homestead dwellings, of sandstone, and adjoining rock wall corral, date around 1870, on Horsethief Creek" (Figure 46). Mattes was apparently unable to develop much information about this site, and cautioned that "...the historic value of these structures lies in the fact that they are typical or representative of the early settlement period of central Kansas, rather than in any actual events with which they may be associated". The Kansas Pacific Railway Company had the original land patent and land records show that it was sold to Henry T. Anderson prior to 1876 (Mattes 1947:24). Leaf briefly mentioned this site in his 1977 report, noting that the location of the buildings is now under the normal pool of Kanopolis Lake but that "portions of a 'rock corral' associated with the stage station are still visible south of the Horsethief Canyon boat ramp in the East Shore State Park" (Leaf 1977:10).

Archival research conducted during this project failed to uncover information that would point to the function of this site as either a stage station or homestead dwelling. A comparison of the location of this site and the location of known stage routes, particularly the Butterfield Overland Dispatch of the 1860s (Butterfield 1925), tends to suggest that 14EW154 was not the site of a stage station. A number of other short-lived stage routes crossed the area, but information on the location of any stage stations along these routes is lacking or vague. It is possible, but not substantiated by our research that the 14EW154 rock corrals were associated with one of the Kanopolis area's numerous large ranches of the 19th century. Herd laws were enforced in much of western Kansas in the late 19th century requiring stock to be herded by day and corraled by night (Hewes 1982). It is possible that the rock corral represents a structure built to comply with herd laws.

During our visit to 14EW154, this site was much as had been described by Leaf in 1977. The stone buildings which had been observed and photographed by Mattes in 1947 are clearly under the waters of Kanopolis Lake, and all that remains is the so-called rock corrals mentioned by both Mattes and Leaf. This rock corral consists of several connecting fences made of stacked Dakota sandstone rocks which are now below one meter in height - substantially below in many areas (Figure 47). These rock fences form two distinct pens, both of which are curvilinear in outline, and both of which cover an expansive area of uplands. In at least one location, the rock wall of this "corral" can be followed relatively intact to the cut-bank of Kanopolis Lake; in a dispersed pile of sandstone rocks on the shore of the lake, representing the eroded wall; and into the waters of the lake. The encountered field conditions at 14EW154 differed substantially from that implied in the literature used to propose a program of National Register testing at this site. 14EW154 presents a particularly difficult problem with respect to archaeological testing, a problem associated both with feasibility and with practicality. The extremely large size of this site, substantially larger than was anticipated by the literature, made mapping a difficult proposition and suggested that testing would be unproductive. Fortunately, the stone walls which make up this site are

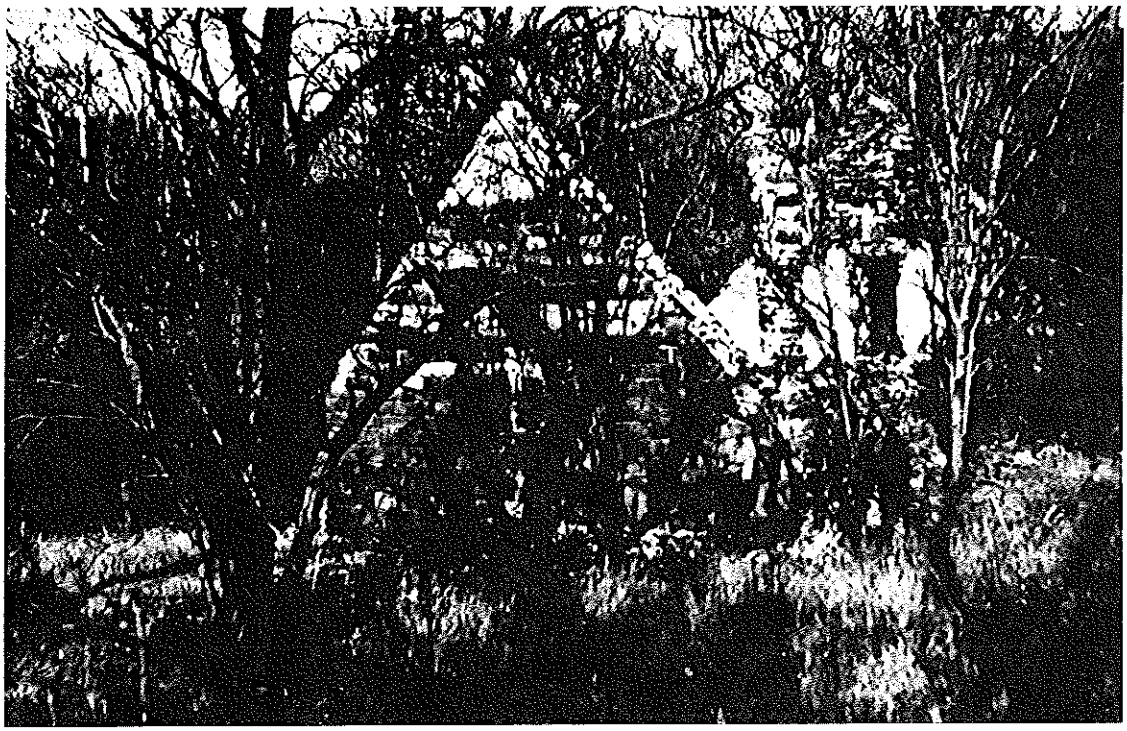

Figure 46. Alleged stage station or homestead on Horsethief Creek in 1947 (Courtesy, Kansas State Historical Society).

Figure 47. General view of section of Rockwall Corral at 14EW154.

already located on Corps of Engineers project maps and show as well on aerial photographs of the area, thus allowing the preparation of accurate maps of this cultural feature without extensive field mapping (Figure 48).

A consideration of a number of observed conditions in the field resulted in a decision that testing of this site was both inappropriate and unfeasible. The large size of the site was one of these factors, which would make 25 meter transect sampling as originally proposed unrealistic. But more important than this was the nature of this site. At a corral the size of this, a majority of functions that might be revealed archaeologically would be expected to be clustered near the settlement, in an area now inundated. Testing along arbitrary fence sections or within the pens of such a large corral would not likely discover any cultural remains. Further, an intensive survey of the cut bank and wide shore of Kanopolis Lake along the area of this corral failed to reveal any cultural materials beside the sandstone rocks which once composed the wall.

The field evaluation of this site, therefore, revealed that the only information available about site 14EW154 consists of the sandstone wall of the corral itself, with all other aspects of this site being inundated. Furthermore, this information has been preserved on Corps of Engineers project maps, in photographs collected during this project, and in our description of the wall as consisting of stacked Dakota sandstone rocks. Additional archaeological research would tell us no more.

Based on the historical and archaeological information available about this site, we recommend it as a non-significant cultural resource. Although stone fences such as this are not particularly common in the project area, they are not unusual on the Central Plains. The fact that the historical association of this "corral" is shrouded in uncertainties diminshes its importance, as does the fact that the settlement with which it was apparently originally associated in now inundated by Lake Kanopolis. From a purely archaeological point of view, this site does not appear to have any more to yield to our understanding of history than is already recorded, and it is our opinion that this site does not warrant nomination to the National Register of Historic Places.

Summary of National Register Evaluations

A total of 11 historic period cultural resources were evaluated for their eligibility for inclusion on the National Register of Historic Places. Six of these resources were evaluated by archaeological testing and five by a non-testing approach (Table 22). These 11 cultural resources were originally identified as important by a 1947 report of the historical aspects of Lake Kanopolis (Mattes 1947), and represent sites associated with early transportation, the military, and the early agricultural settlement of the area.

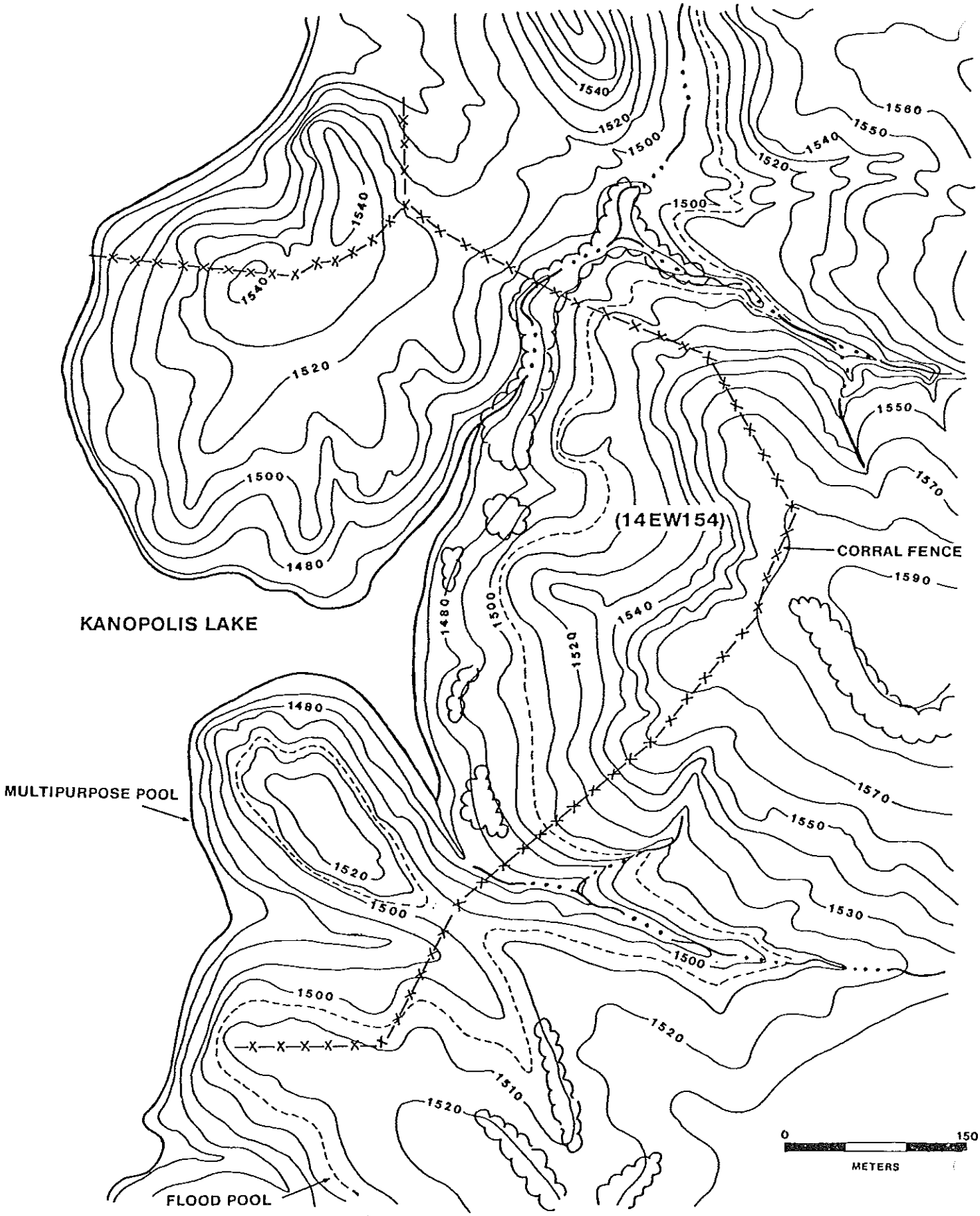

Figure 48. Location and plan view of 14EW154 based on a review of aerial photographs, field reconnaissance and Kanopolis Lake project maps.

Table 23. Summary of National Register evaluations at Kanopolis Lake.

Site Name	Site Number	Site Type*	Testing Approach	Recommendation
Faris Caves	14EW7	A	Testing	Nominate to Natl. Register
Fort Ellsworth	14EW26	M	Testing	Government portions are not significant
Farisville Post Office	14EW103	A	Testing	Not Significant
Smoky Hill Bridge	14EW105	T	Non-Testing	Nominate to Natl. Register
Smoky Hill Ford	14EW106	T	Non-Testing	Not significant
Fort Zarah Road	14EW105/106	T	Non-Testing	Nominate to Natl. Register
Black Ranch	14EW119	A	Testing	Nominate to Natl. Register
Red Rock Canyon Shelter	14EW139	A	Testing	Not Significant
Millett Ranch	14EW152	A	Testing	Not Significant
Smoky Hill Trail	14EW153	T	Non-Testing	Nominate to Natl. Register
Horsethief Creek Corrals	14EW154	A	Non-Testing	Not Significant

*T=transportation M=military A=agricultural

The sites associated with early transportation include the Smoky Hill Trail/Denver Express Road (14EW153), the Fort Zarah Road (14EW105 and 14EW106), the Smoky Hill Ford (14EW105), and the government bridge across the Smoky Hill River (14EW106). All these sites are felt to be historically significant. Except for the Smoky Hill Ford, well preserved remains of each was observed and documented during this project. Archaeological remains possibly associated with the Smoky Hill Ford were also documented, but in general the remains of this site appear to have been largely obscured or destroyed.

Sites associated with the military occupation of the area include Fort Ellsworth (14EW26). Five localities possibly associated with this fort, used in 1864 and 1865 were identified on government and private property during this project located at least partially on government land. These artifact scatters may be related to the fort but one may be the site of the U.S. mail station of the 1860s. The government owned portion of these localities does not appear to possess sufficient archaeological integrity to warrant a nomination to the National Register.

Of this series of contemporary sites in the vicinity of Fort Ellsworth, all associated with an important phase of early transportation in Kansas, only 14EW105/106 and 14EW153 are both located on government land and are sufficiently well preserved and historically significant to warrant nomination to the National Register of Historic Places.

The balance of the sites evaluated during this project are related to the early agricultural settlement of the area, and include the Faris Caves (14EW7), the Farisville Post Office (14EW103), the Black Ranch (14EW119), the Millett Ranch (14EW152), the Rock Shelters on Red Rock Canyon (14EW139), and the alleged stage stations or homestead dwellings on Horsethief Creek (14EW154). Of these, the cultural use of 14EW139 could not be supported archeologically, and it is as a result not felt to be significant. Site 14EW154 is largely inundated, and consists only of several large areas enclosed by rock walls, so called corrals. This site is not felt to possess information important in history, and cannot be associated with important historical events, and is therefore not felt to be significant.

The remaining sites all represent the sites of successful, long term agricultural settlements. Long term settlements represent, in general, poor sources of well defined archaeological information about any one period of the past. Furthermore, this type of site is common in the area and in the Great Plains in general, and is felt to represent a redundant data source for which a nomination to the National Register is usually not warranted. Two of these sites, however, contain aspects which make them unusual and which warrant nomination to the National Register of Historic Places.

At the Faris Caves, standing architecture in the form of caves dug into a sandstone bluff appears to represent a rare form of Kansas architecture. Because of this, we recommend nomination of the site to the National Register based on its historical architectural merits. At the Black Ranch, a standing architectural component from the 19th century warrant the nomination of this site to the National Register on the basis of archaeological and architectural historical significance.

Of the 11 sites evaluated during this project, therefore, six (14EW26, 14EW103, 14EW106, 14EW139, 14EW152, and 14EW154) are not felt to represent cultural resources of sufficient significance to warrant a nomination to the Ntional Register of Historic Places. Five, however, are recommended as significant and should be nominated to the National Register. These significant sites include 14EW7, 14EW119, 14EW105, 14EW153, and 14EW105/106 (Fort Zarah Road).

SUMMARY AND CONCLUSIONS

This report has discussed the results of a program of local historical research, National Register evaluations of archaeological sites, and survey and documentation of archaeological sites identified through archival research. This research has been important in that it is focused solely on the historical archaeological record, unprecedented for the Kanopolis Lake project and unusual on the Great Plains. This research has done much to correct a bias resulting from decades of archaeological research at Kanopolis Lake, which has focused almost exclusively on cultural resources associated with the prehistoric period.

An important result of this project has been the review of extensive information on the history of the Kanopolis Lake area and the compilation of a comprehensive local history dealing specifically with this part of Kansas. In many respects, the Kanopolis Lake area is a microcosm of the settlement of Kansas during this historic period, due largely to the participation of the Kanopolis area in broader patterns of American history that shaped the rest of Kansas and the Great Plains in general. The local history presented in this report is a valuable document in itself, but obtains a greater importance as a context for the understanding of the archeological resources which represent a major focus of this research.

A fundamental focus of the research at Kanopolis Lake has been on the evaluation of 11 historical archaeological sites for their eligibility for inclusion on the National Register of Historic Places. The National Register serves as a primary planning tool for historic preservation by establishing criteria that allow us to evaluate the local, state or national importance of a particular site. The importance of a site in relation to National Register criteria determines how a site can best be managed, that is, how government actions can best avoid adverse impact to resources determined to be eligible for listing on the National Register.

The 11 sites to be evaluated for their National Register significance were originally identified as important in 1947 (Mattes 1947). They include the Black Ranch (14EW119), the Millett Ranch (14EW152), Fort Ellsworth (14EW16), the Smoky Hill bridge (14EW105), the Smoky Hill ford (14EW106), the Fort Zarah/Santa Fe road (14EW105/106), the Smoky Hill Trail/Denver Express Road (14EW153), rock shelters in Red Rock canyon allegedly used to house early homesteaders (14EW139), alleged stage stations and rock wall corral on Horsethief Creek (14EW154), the Farisville Post Office (14EW103), and the Faris Caves (14EW7). Four of these sites, the Smoky Hill bridge, the Smoky Hill ford, the Fort Zarah/Santa Fe Road, and the Smoky Hill Trail/Denver Express Road, were to be evaluated using a non-testing approach. The remaining seven sites were to be tested using traditional archaeological testing.

Two of these sites, the Black Ranch and the Faris Caves, are felt to represent cultural resources eligible for listing on the National

Register, with this conclusion focusing on standing architectural components. Three other sites, the Smoky Hill bridge, the Fort Zarah/Santa Fe road, and the Smoky Hill Trail/Denver Express Road, are closely related in age and function, and are felt to be cultural resources whose significance warrants nomination to the National Register recognizing their importance for early transportation and settlement of Kansas.

The balance of the 11 cultural resources evaluated for National Register significance during this project were not felt to be of sufficient importance to warrant their nomination to the National Register. This does not necessarily mean that these sites have nothing to contribute to the understanding of the history of Kansas, only that the data they possess does not appear to be sufficiently unusual to warrant their preservation at public expense. Generally, the information contained in these sites is felt to be duplicated in other sites in the region. Their loss is therefore unfortunate but is not felt to jeopardize the representativeness of the protected archaeological data base.

A final significant aspect of our research at Kanopolis Lake has been the identification of potential archaeological sites from archival research, and the survey for these sites using traditional archaeological survey techniques. As a result of this program, a total of 53 previously unrecorded archaeological sites were inventoried, substantially increasing the total site inventory for Ellsworth County. Of these, 51 were historical archaeological sites. Prior to this survey few historical archaeological sites were recorded on Kanopolis Lake project lands.

Although only survey-level information is available on most of these newly inventoried cultural resources, an attempt was made to evaluate the National Register significance of each. Our evaluations of the 53 historical archaeological sites inventoried during this research, including the 11 subjected to detailed National Register evaluations, led to conclusions that five are significant (all of these were among the 11 receiving detailed National Register evaluations), 20 are not-significant, and 28 are potentially significant. The potentially significant sites are neither clearly significant nor clearly not significant, and will require additional historical or archaeological research before a definitive evaluation can be presented.

Future research at the sites proposed for testing should center around the investigation of several major research goals discussed as follows.

First, the 19th century settlement of the Kanopolis area saw its transformation from a male-dominated, isolated frontier to an area characterized by a settled agricultural economy tied into regional and national markets by the railroad. A temporally defined hierarchy of sites should exist in the area reflecting this change. Early sites should be characterized by a limited and heavily curated material assemblage with no female or adolescent-linked artifacts; an insubstantial architectural component of log, sod, or dugout

construction; and a reliance on wild rather than domesticated animal food resources. Subsequent settlement should be characterized as long term occupations with a balanced sex ratio and the presence of adolescents; with substantial stone or frame buildings; with a wide range of material goods from eastern manufacturing centers and Europe; with a less curated material assemblage; and with a reliance on domesticated rather than wild animal food species. To what extent is this settlement dichotomy reflected at specific historic sites within the Kanopolis Lake area? Is there evidence for both settlement stages at the same site, or are these settlement patterns spatially discrete?

Late 19th and early 20th century agricultural settlement in the Kanopolis Lake area was increasingly one of large scale ranching. On individual ranches from this period, a hierarchy of wealth existed due to the presence of the owner and a hierarchy of hired ranch help. This hierarchy should be reflected in a comparison of individual sites due to the spatial separation of settlement within an individual ranch. Within an individual ranch and in the area in general this hierarchy should be possible to reconstruct based on differences in the size, form, and quality of residential architecture; the presence, absence, and relative importance of ranching equipment and tools in the immediate vicinity of a residence; and the nature (quality, quantity, variability) of the general domestic artifact assemblage. Can such a synchronic settlement hierarchy be reconstructed for sites in the Kanopolis Lake area? What material differences are important for defining such a hierarchy and, in a comparative sense, what can this tell us of the lives of the members of the various hierarchical groups?

Evidence from the recent testing at Kanopolis Lake has suggested that major floods occuring after the completion of the dam have had serious depositional effects in certain parts of the reservoir, particularly the upper reaches. Documentation of the various effects of this in the various parts of the reservoir are important for continued archaeological research in the area and particularly in regards to continued survey efforts. The effects of this increased deposition should be assessed at any sites tested within the reservoir, particularly those at its upper reaches, with the goal of mapping the severity of this recent deposition.

In addition to recommendations on the National Register significance of the 11 evaluated sites and on the further archaeological needs of the sites newly inventoried during this project, the present research has several related recommendations to offer. First, the situation at 14EW7 has suggested that sedimentation since the construction of Kanopolis Lake may affect recovery and investigation of archaeological resources. It is also felt this affect will be differential throughout the reservoir. It is recommended that prior to the conduct of additional archaeological work in the reservoir a detailed geomorphological study of the reservoir be conducted. This study should focus specifically on problems associated with site recovery.

A second recommendation is that future historic site testing and evaluation at Kanopolis and elsewhere involve a slightly different approach, this approach should be discreetly phased, and should provide a separation between archival and archaeological research. It is felt that properly undertaken, sufficient archival information about a site's function and historical association may decrease the amount of testing needed at sites and may allow determination of non-significance prior to the conduct of archaeological testing. It is suggested that the adoption of a discreetly phased approach to the evaluation of historic sites would result in an increasing cost effective approach with increasingly useful results.

It is also recommended that steps be taken to protect clearly important sites such as 14EW7 and 14EW119 from ongoing vandalism. In general these sites need to be stabilized from deterioration or preserved artificially through thorough documentation.

In addition, it is felt that certain resources inventoried during this project may be profitably used by the government to help interpret the areas history. Site 14EW131, a standing but abandoned one-room schoolhouse, could be moved to the Kanopolis project office and developed into an interpretive museum of the project's history. Site 14EW135, a rare hay stacker, could also be profitably removed to the project office for interpretive purposes. These artifacts, in association with the information contained in this report, could and perhaps should be used to bestow a greater understanding and appreciation of the area's past on visitors to Kanopolis Lake.

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APPENDIX I

PHOTOGRAPHS OF INVENTORIED SITES

Figure 49. General views of 14EW107 and 14EW108. General view to northeast at 14EW107 (upper) and general view to west at 14EW108 (lower).

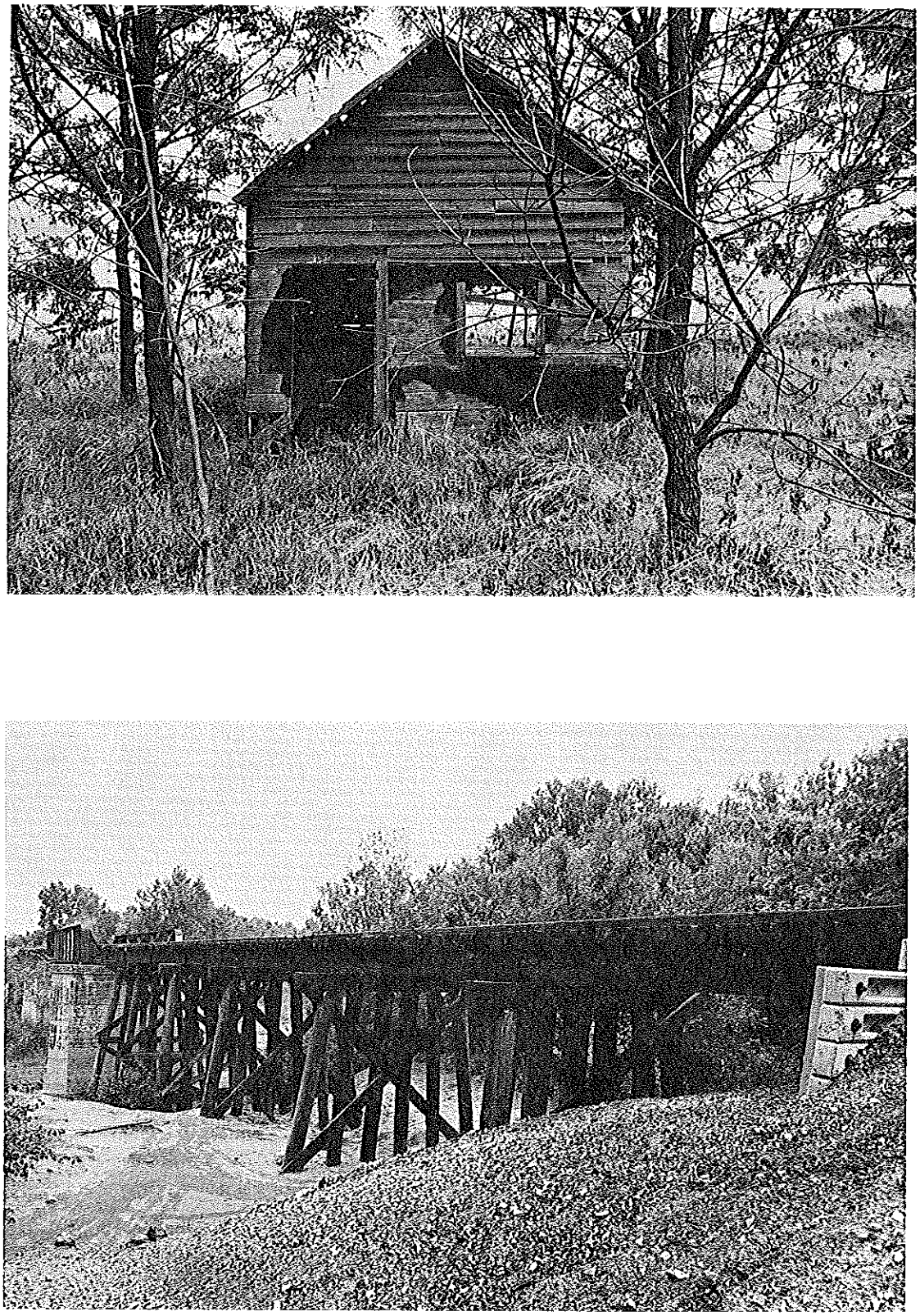

Figure 50. General views of 14EW109 and 14EW110. Building 1 at 14EW109 (upper) and side view of bridge at 14EW110 (lower).

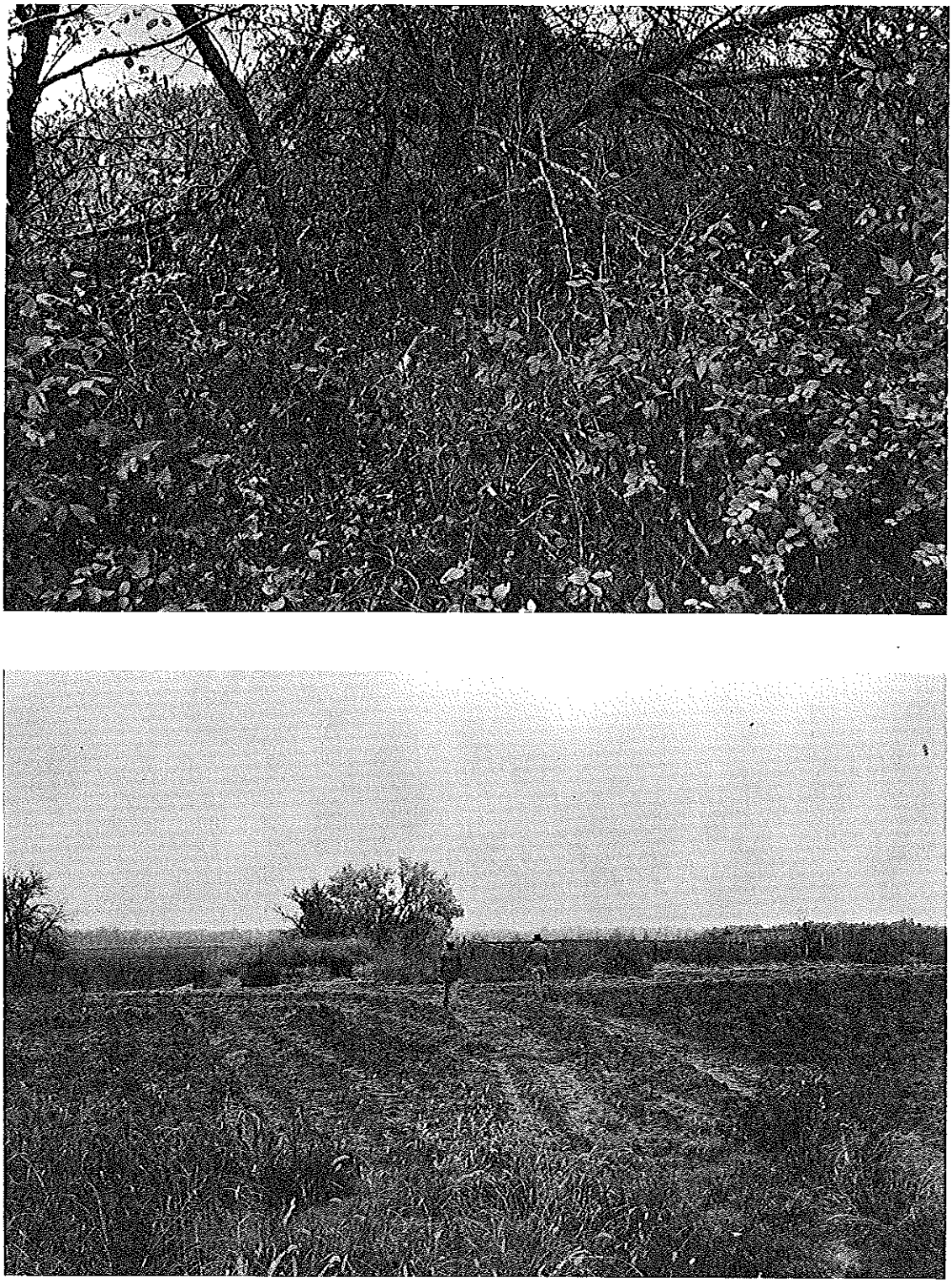

Figure 51. General views at 14EW111 and 14EW112. Retaining wall in dense growth at 14EW111 (upper) and general view to south at 14EW112 (lower).

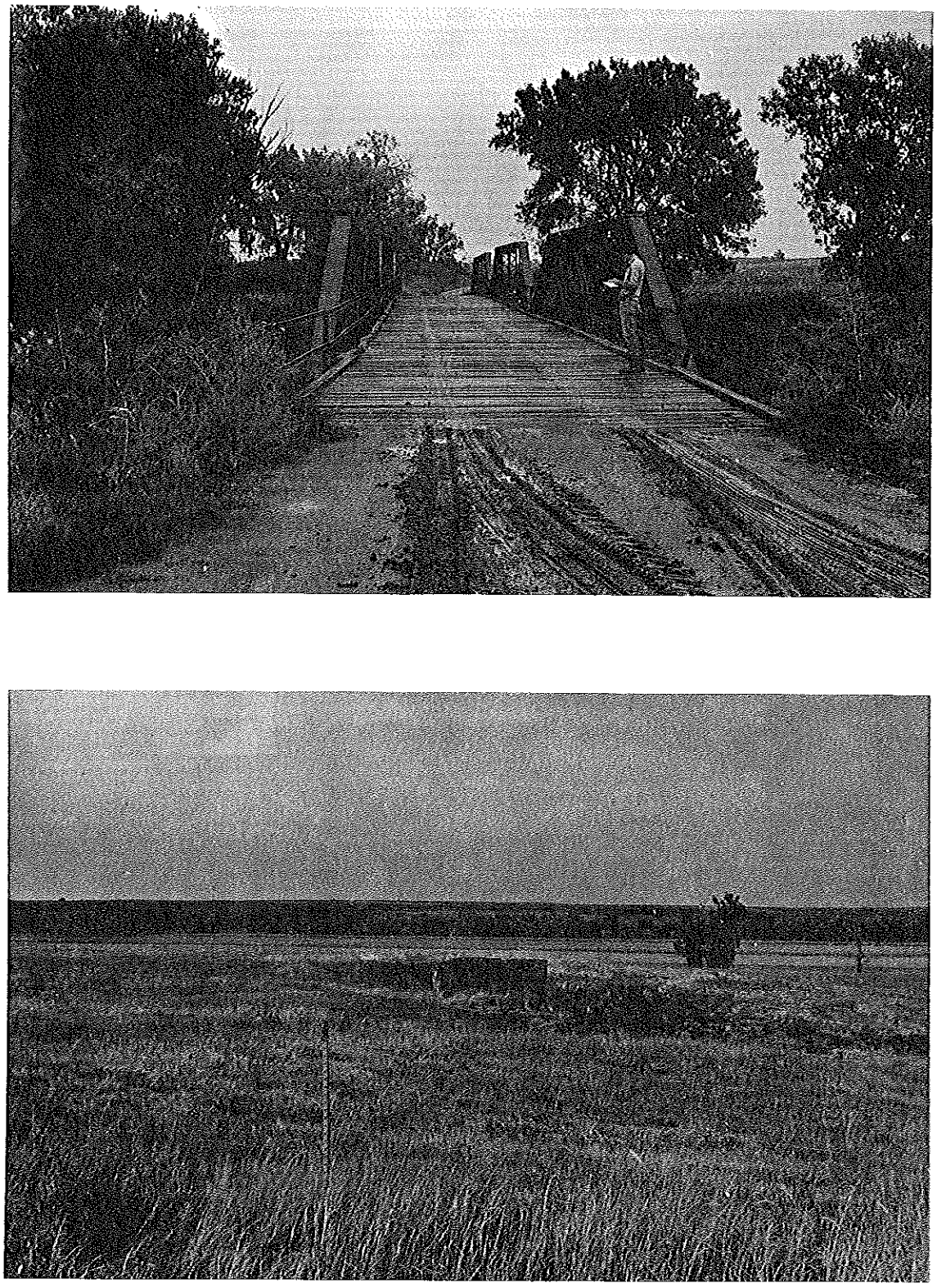

Figure 52. General views of 14EW113 and 14EW114. General view of bridge at 14EW113 (upper) and general view to north at 14EW114.

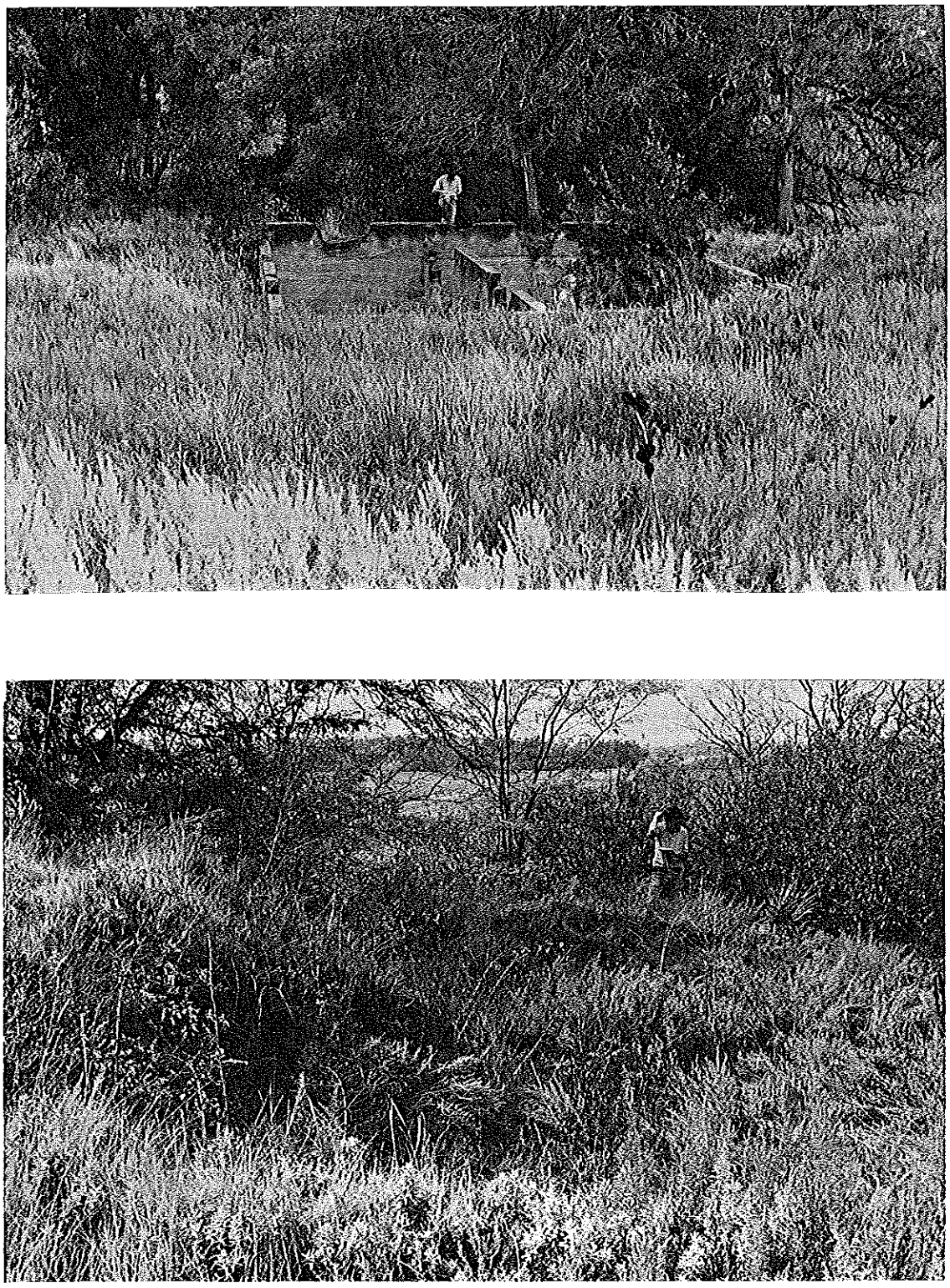

Figure 53. General views of 14EW115. General view to south (lower).

Figure 54. General views of 14EW116 and 14EW117. General view of dugout at 14EW116 (upper). General view to north at 14EW117 (lower).

Figure 55. General views of 14EW118 and 14EW120. General view to north at 14EW118 (upper) and general view to north at 14EW120 (lower).

Figure 56. General views of 14EW125 and 14EW126. North view of house at 14EW125 (upper) and general view to east at 14EW126 (lower).

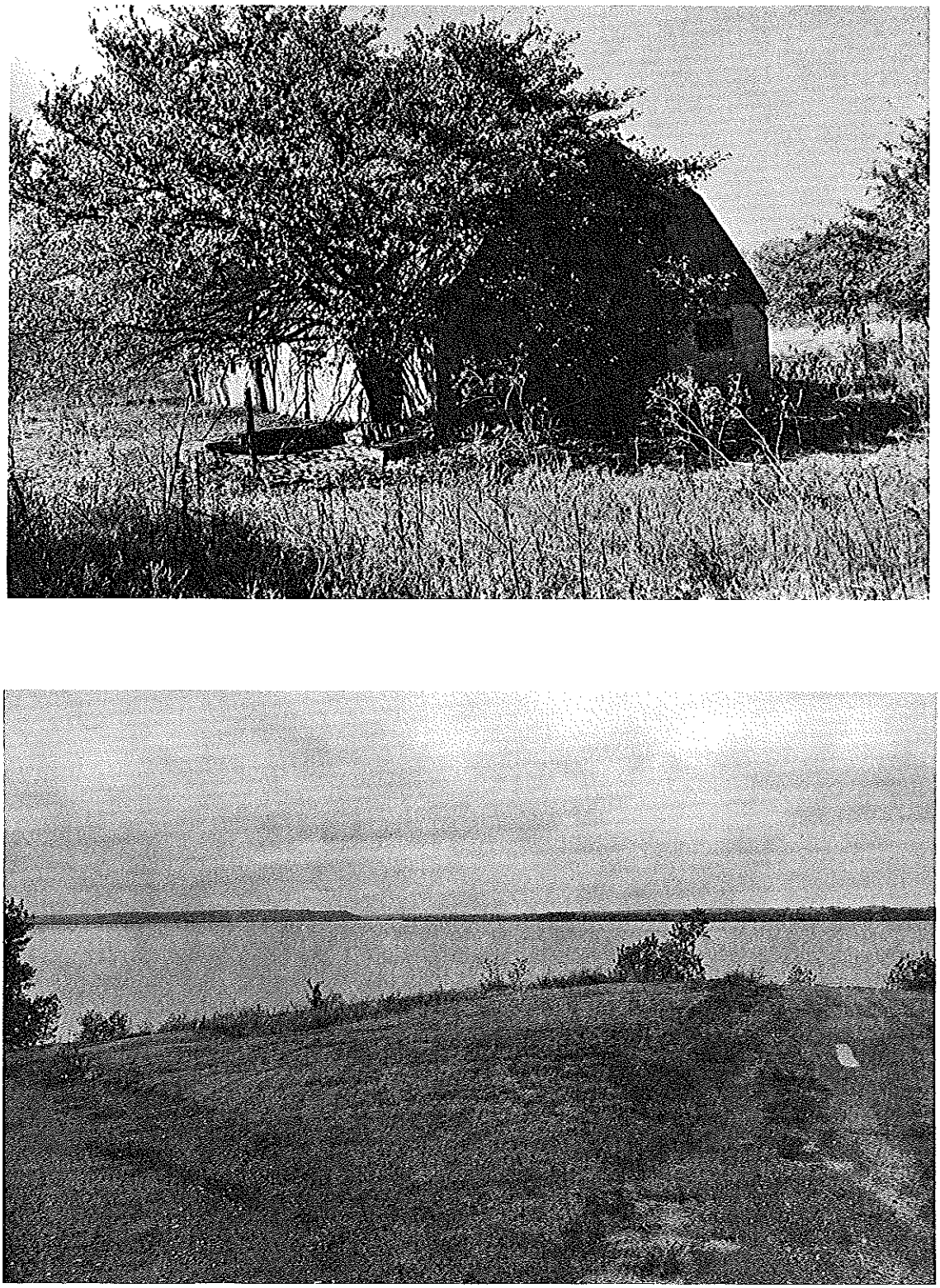

Figure 57. General views of 14EW128 and 14EW129 showing barn at 14EW128 (upper), general view to west at 14EW129 (lower).

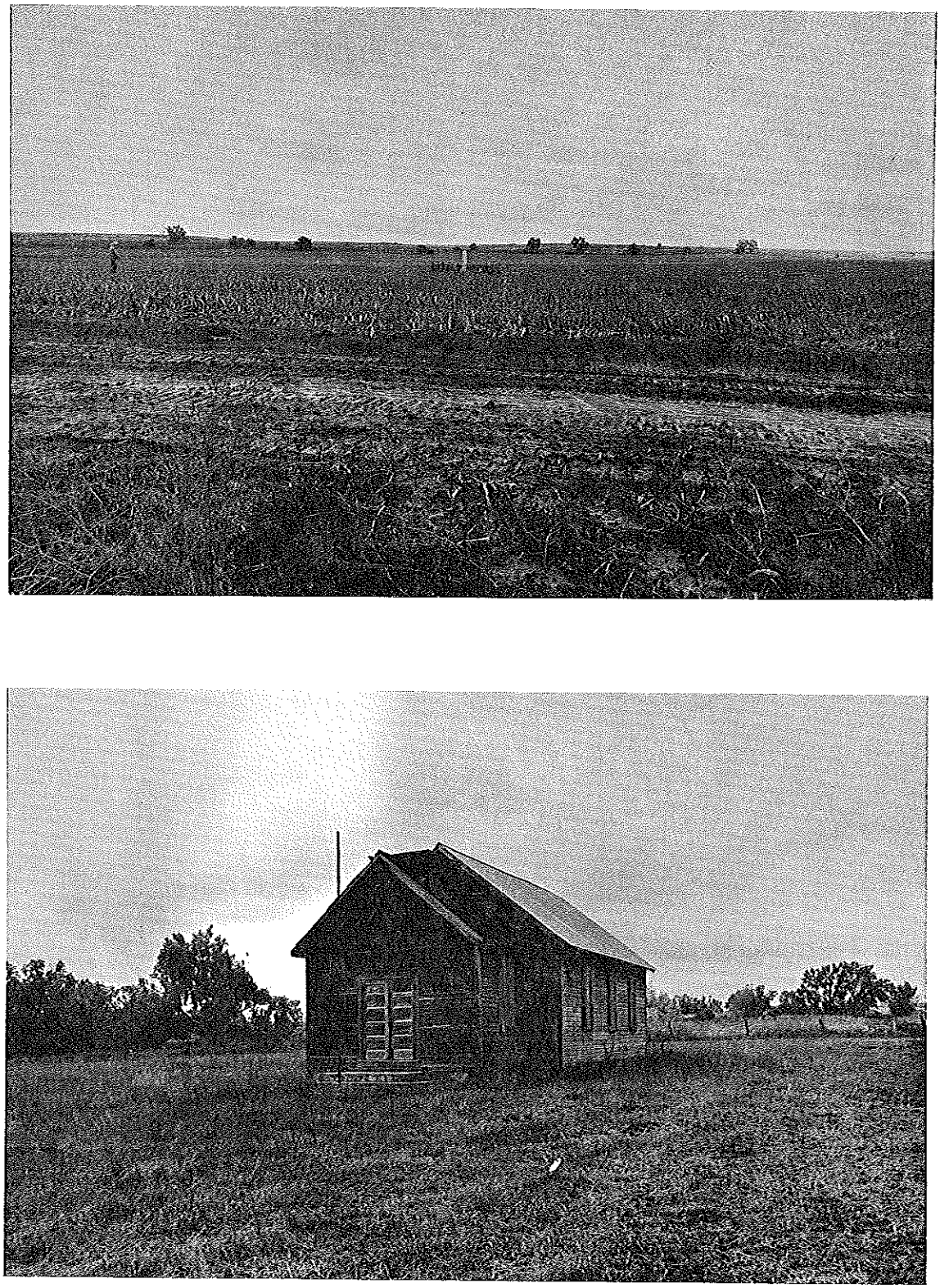

Figure 58. General views of 14EW130 and 14EW131. General view to east of site and graveyard at 14EW130 (upper), view of old school at 14EW131 (lower).

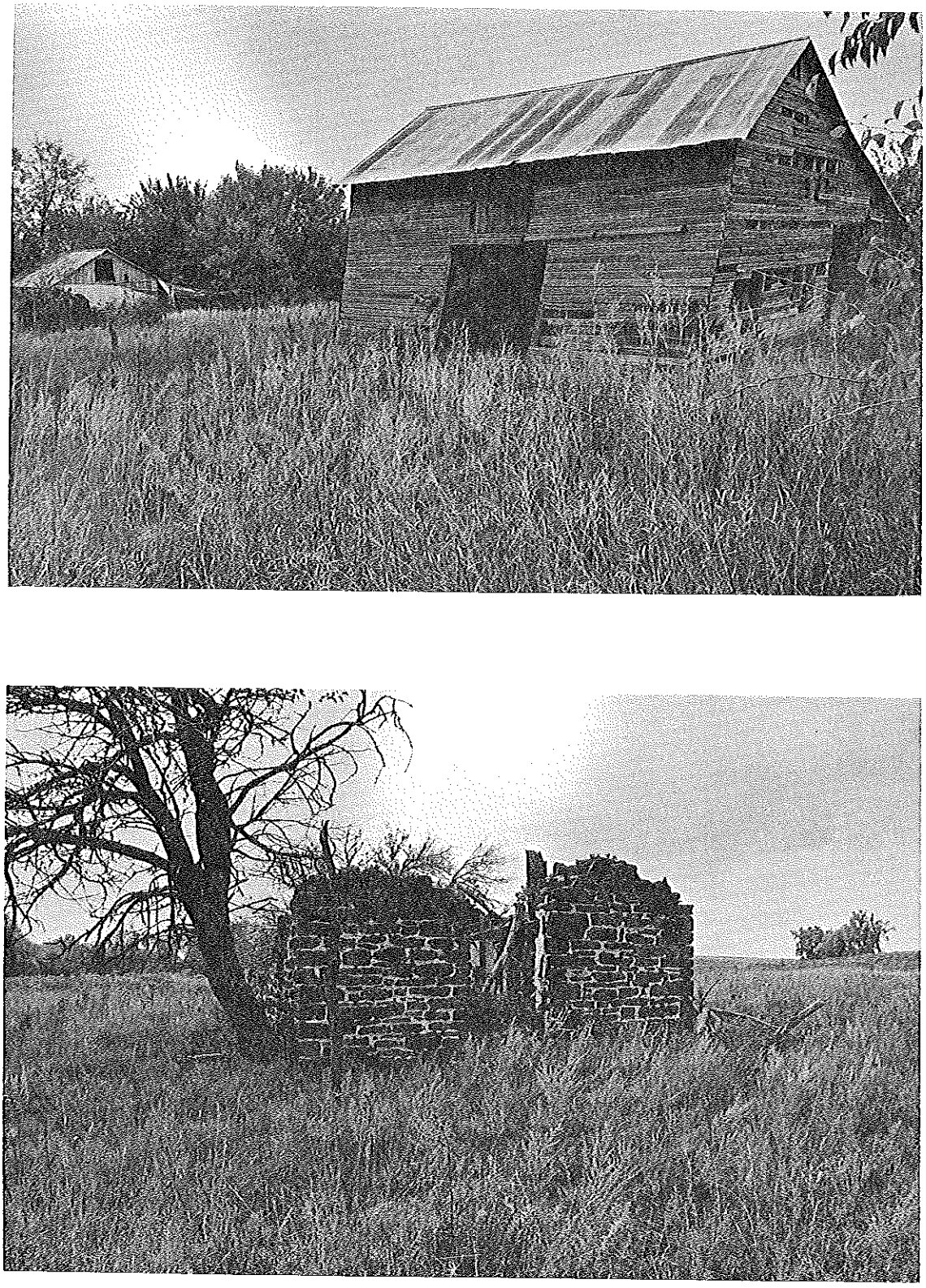

Figure 59. General views of 14EW132 and 14EW133. View of standing structure at 14EW132 (upper). View of single room house at 14EW133 (lower).

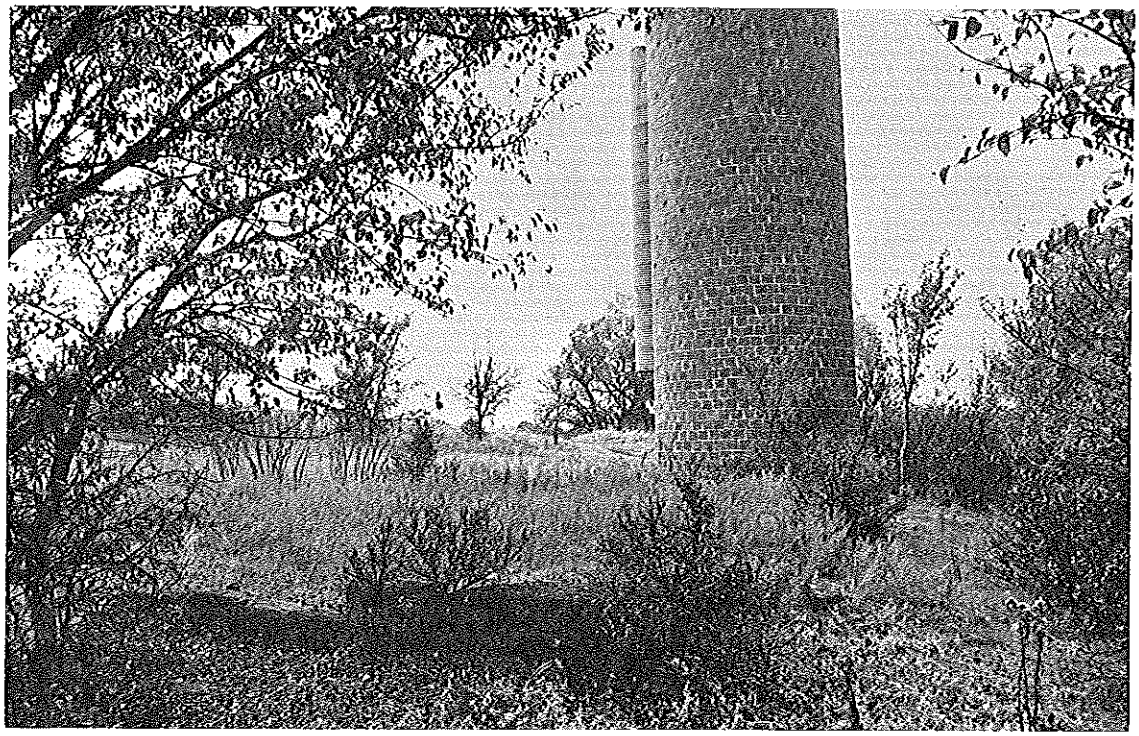

Figure 60. General views of 14EW134 and 14EW135. View of house foundation and silo at 14EW134 (upper), view of hay stacker at 14EW135 (lower).

Figure 61. General view of 14EW137. View of house foundation at 14EW136 (upper) and view of two-story structure at 14EW137 (lower).

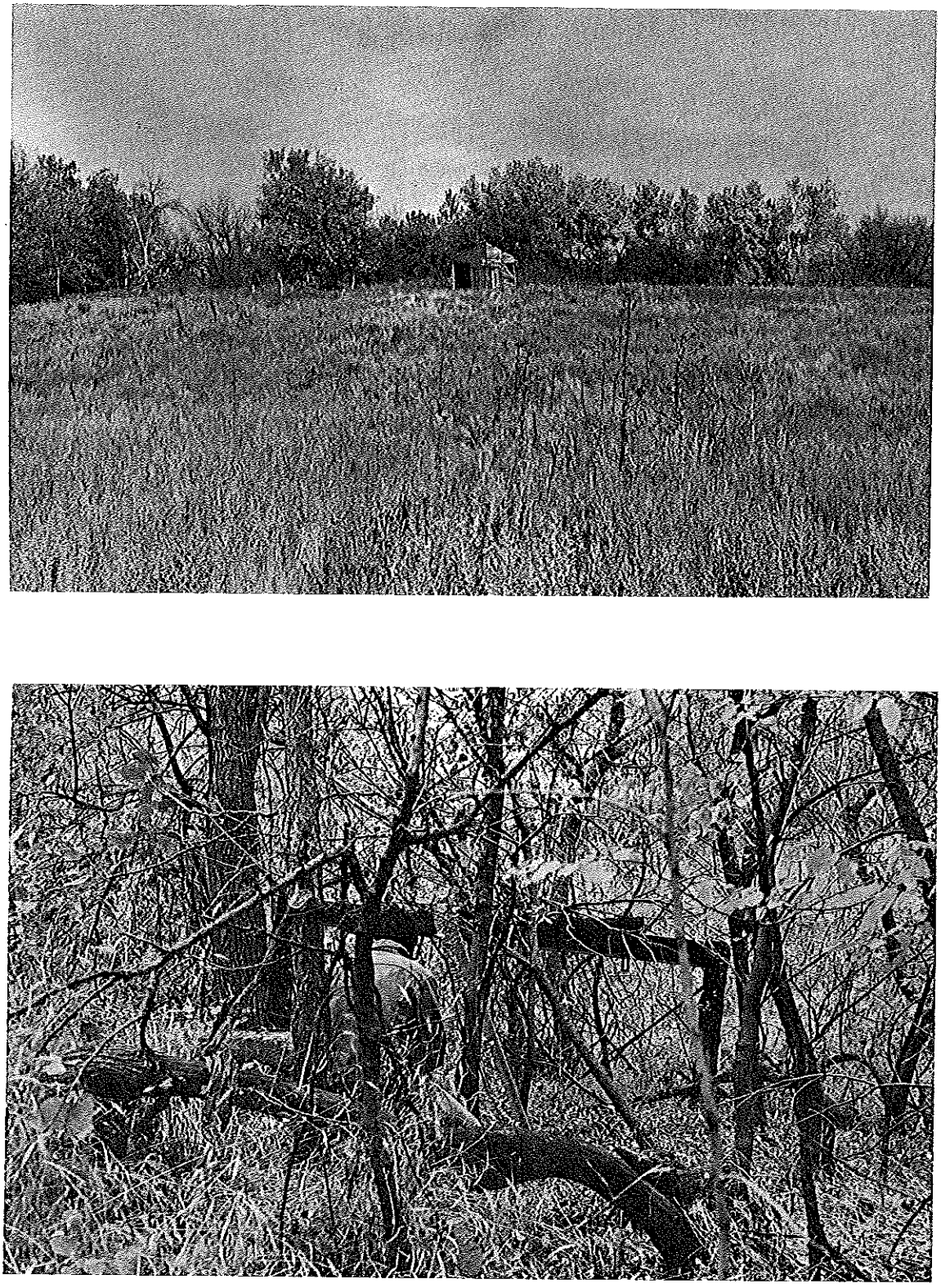

Figure 62. General views of 14EW138 and 14EW141. View of standing outbuilding at 14EW138 (upper), view of bridge ramp and metal at 14EW141 (lower).

Figure 63. General views of 14EW142 and 14EW145. View of standing structures at 14EW142 (upper), view showing foundation at 14EW145 (lower).

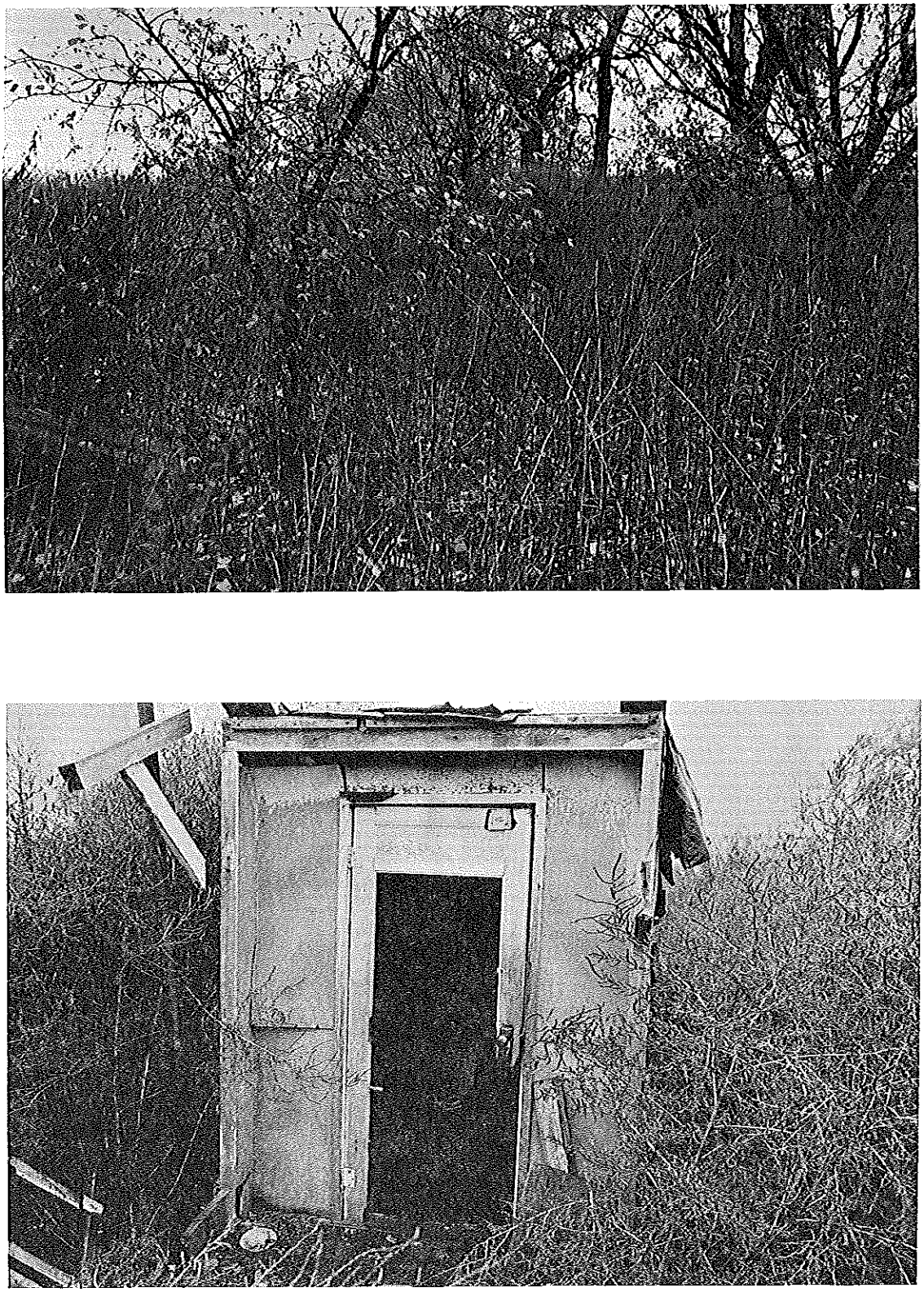

Figure 64. General view of 14EW146 and 14EW147. 14EW146 (upper) and entrance to basement house at 14EW147 (lower).

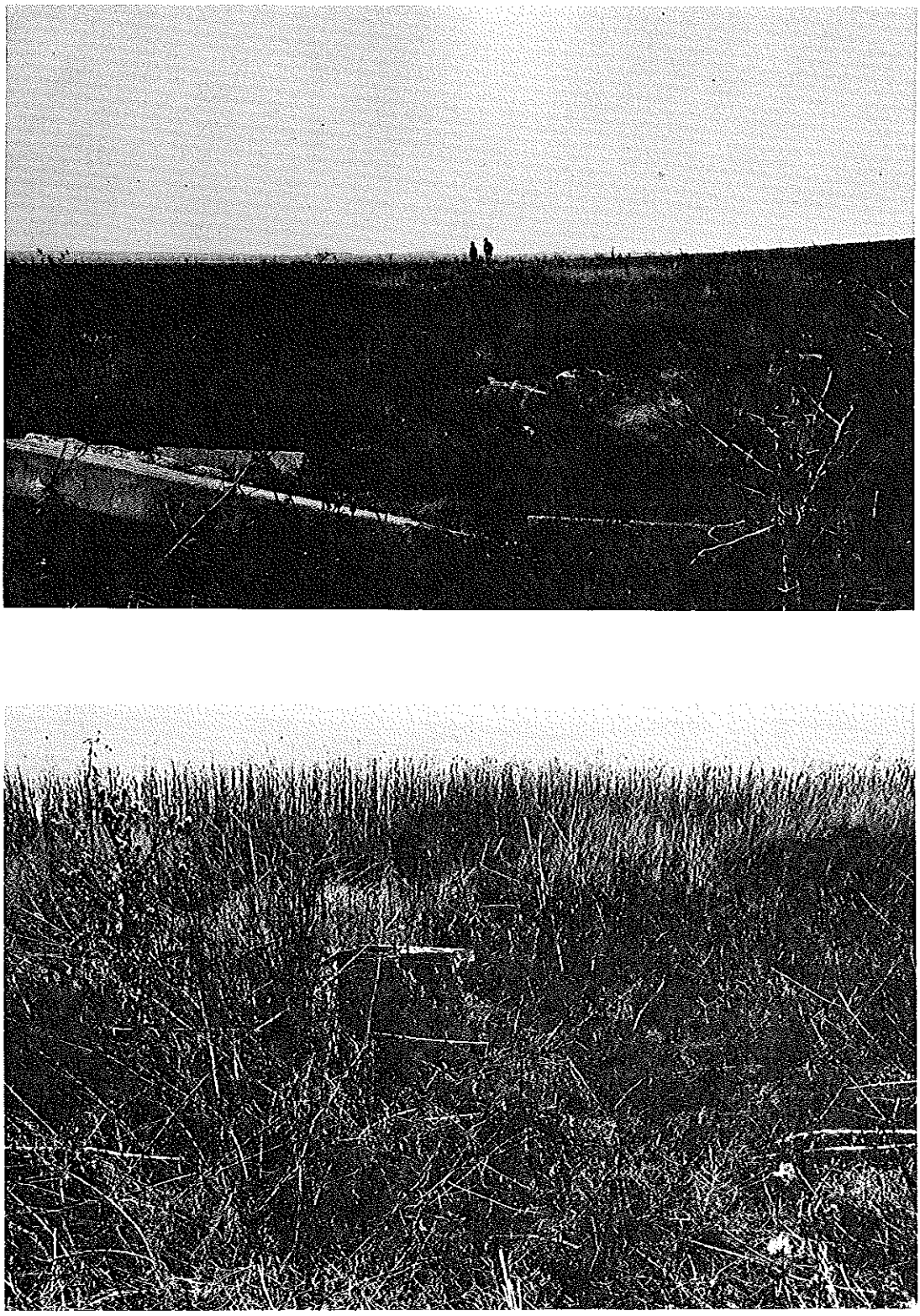

Figure 65. General views of 14EW148 and 14EW149. General view to east at 14EW148 (upper), view of cellar at 14EW149 (lower).

Figure 66. General views of 14EW150 and Fremont's Knob. Mapping foundation at 14EW150 (upper), general view of Fremont's Knob (lower).

APPENDIX II: GLOSSARY OF TECHNICAL TERMS

alluvium - Soils, sands or gravels deposited by the slowing of running water, such as those released when a stream floods

anthropology - The study of humans inclusive of their physical and cultural attributes. Traditionally, anthropology includes the subfields of physical and cultural anthropology, linguistics, and archaeology.

archaeology - The scientific discipline responsible for recovering, analyzing, and interpreting the unwritten portion of human kind's historic and prehistoric past.

archaeological assessment - An evaluation of the archaeological resources present in an area, their scientific significance, and the cost of protecting or properly investigating them.

archaeological excavation - The scientifically controlled recovery or salvage of a site designed to yield maximum information about the life of the inhabitants, their ways of solving human problems, and of adjusting to and modifying their natural environment.

archaeological inventory - A pedestrian field survey of a given area. This generally includes a records-check.

archaeological resources - Objects and areas made or modified by humans and the data associated with these artifacts and features.

camp site - An archaeological deposit, usually small and thin, which is the result of a brief settlement by a group of people.

component - The manifestation of any given focus (phase) at a specific site. The social equivalent of component is the community.

contour - An imaginary line connecting points of equal elevation on the surface of the soil.

culture - The lifeways of a particular people, including the habits, customs, and artifacts associated with gaining their living, organizing their social and political activities, and practicing their religious rituals and ceremonies.

cultural resources - Districts, sites, structures, and objects and evidence of some importance to a culture, a subculture, or a community for scientific, engineering, art, tradition, religious, or other reasons. These resources and relevant

environmental data are important for describing and reconstrucing past lifeways, for interpreting human behavior, and for predicting future courses of cultural development.

cultural resource management - The development and maintenance of programs designed to protect, preserve and scientifically study and manage cultural resources.

curation - The systematic maintenance and storage of the archaeological data base in such a manner as to retain the integrity of those data and allow it to be accessible and usable for future researchers.

determination of eligibility - The determination that a property is eligible for inclusion in the National Register of Historic Places. The determination process, outlines in 36 CFR 63, provides the mechanism whereby a government agency can determine whether its undertaking affects significant properties, as required by P.L. 93-291, Section 3 (a) or (b), for those properties not already on the National Register.

diagnostic artifact - Material remnant of a historic or prehistoric technology that provides a temporal and cultural association, which has been determined by previous scientific investigations.

effect - An undertaking shall be considered to have an effect whenever any condition of the undertaking causes or may cause any change, beneficial or adverse, in the quality of the historical, architectural, archaeological, or cultural characteristics that qualify the property to meet the criteria of the National Register.

environment - The physical character of the area in which a culture occurs, including its flora, fauna, climate and land features.

erosion - The wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep.

feature - An area in or on the ground where evidence of past human activity can be seen or detected. Among the most frequent features at archaeological sites are fire pits, storage pits, burial pits, hard-packed house floors, and post holes.

floodplain - The land bordering a stream, built up of sediments from overflow of the stream and subject to inundation when the stream is at flood stage.

geomorphic - Relating to the form of the earth of its surface features.

sedimentation - The natural process of soil accumulation derived from alluvial (riverine) or colluvial (mass earth movement) processes.

strata - Natural or cultural layers in the soil or archaeological deposits one upon the other. The relationships indicated by stratigraphy provide a relative system of dating archaeological materials and are therefore extremely important in establishing cultural sequences in an area.

integrity - A site that is intact and undisturbed enough to permit the preservation of significant scientific data possesses integrity.

intensive survey - Systematic, detailed, on-the-ground field inspection conducted by professional archaeologists which is sufficient to permit determination of the number and extent of the resources present and their scientific importance.

intrusive - An archaeological object occurring out of its proper cultural and chronological context.

isolated find - The occurence, usually on the surface, of a single artifact. Not considered a true site.

national register, the - An official list maintained by the National Park Service of architectural, historical, archaeological, and cultural sites of local, state, or national significance worthy of preservation. These sites are nominated to the Register by states or federal agencies and are approved by the National Register staff of the National Park Service.

principal investigator - A professional archaeologist and the person directly responsible for the location and identification or data recovery project. He is responsible for the validity of the material presented in cultural, historical, and archaeological reports. The principal investigator signs the final report and in the event of controversy or court challenge testifies on behalf of the client in support of report findings.

Protohistoric - The time immediately preceding the beginning of written history in an area. Quite often European trade goods occur on protohistoric sites, since trade items found their way to the Indians before there was any written history concerning them.

research design - A plan, usually generated by the principal investigator in response to a scope-of-work, outlining the proposed approach to a location, identification, or data recovery project (systematic inventory, field survey, testing, or large scale excavation). The research design spells out relevant research problems, research methods, and some predicted results of the study.

scope-of-work - A document prepared by a sponsoring agency, the State Historic Preservation Officer or the National Park Service, setting forth its requirements in a cultural resources study.

sediment - Deposit of mineral particles, usually clay, silt or sand.